

DISPLAY CONTENT MANAGER

A MEDIAEDGE APPLICATION



Installation and User Guide Software Version 1.10



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A MEDIAEDGE APPLICATION

Installation and User Guide

Software Version 1.10

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Preface

About This Manual

This manual describes the installation and operation of the Display Content Manager (DCM) software only. It is not a comprehensive MediaEdge system manual. Other components of a MediaEdge system such as the MediaEdge-SVS4 server software, set top box hardware, SWT4 software playout application, encoders, etc. are discussed in manuals specific to those products.

Display Content Manager Package Contents

The DCM package contains the following:

 Software DVD-ROM in a sealed envelope - this disc contains all software for installing the DCM as described in DCM Software Installation on page 53.

Note Prior to opening the software disc envelope, please read the License Agreement. Opening the software envelope constitutes an acceptance of the terms and conditions of the License Agreement

- Installation and User Guide this manual
- License Agreement

Minimum System Requirements

Computers on which the DCM software will be installed must meet the following minimum system requirements:

- CPU:
 - Intel® Pentium® 4 3 GHz or faster if not using playlist preview
 - Intel® Core2Duo 2 GHz or faster if using playlist preview.

Note CPU must support the SSE2 instruction set. The DCM and Status Monitor applications will not launch if the CPU does not support SSE2.

- RAM:
 - 1 GB or more with Windows® XP
 - 2 GB or more with Windows® Vista
- 40 GB or more available hard drive space.
- Windows® Vista Business/Enterprise/Ultimate (Service Pack 1 or later), Windows® XP (Service Pack 3)
- Internet Explorer 6.x or above
- Graphics card with hardware-based DirectDraw overlay
- Display resolution of 800x600 (SVGA)

Note The recommended resolution is 1920x1080 or1920x1200 (WUXGA) for viewing HD content and for playlist preview. All screen shots in this manual were produced on a 1920x1200 pixel display.

- 100Mbps Ethernet network card
- One free USB port
- Soundcard

Software Prerequisites

Prior to installing the DCM software, verify that the recommended operating system and other necessary software is installed on any machine on which the DCM will be installed. See *DCM Installation Prerequisites on page 24* for more information.

Operating System

The following Windows Operating Systems and Service Pack revisions are recommended when using MediaEdge Server and DCM software:

- Windows Server 2008 with SP2 or Windows Server 2008 R2 (MediaEdge SVS4 Servers)
- Windows XP with SP3 (DCM/Control PCs)
- Windows Vista with SP2 (DCM/Control PCs)

Other Software

Before proceeding with the DCM software installation, verify that Internet Information Services (IIS) and an FTP server are properly installed and configured on your MediaEdge server or desktop PCs.

See *Server Software on page 24* for more information on installing and configuring IIS and the FTP server.

If not already installed, SQL Server 2005 Express Edition will be installed by the MediaEdge-SVS4 or Display Content Manager installers.

Preface

MediaEdge DCM Overview and Prerequisites

MediaEdge Overview

MediaEdge is a multi-channel, multi-location video delivery system using standard TCP/IP networks and display devices. The flexible, modular design of the MediaEdge System offers a cost-effective method for distributing video content to multiple PC and set-top box clients. Content delivery capabilities include pre-programmed playback, live streaming of video broadcasts and full-featured interactive video-on-demand services.

In order to accommodate various content distribution and playout scenarios, a MediaEdge system can be a simple system with local content storage and playout to one or more devices or a multi-site system spanning multiple world-wide time zones and encompassing many networks, playout devices and content displays of various types.

A simple single-server MediaEdge network is illustrated in Figure 1.

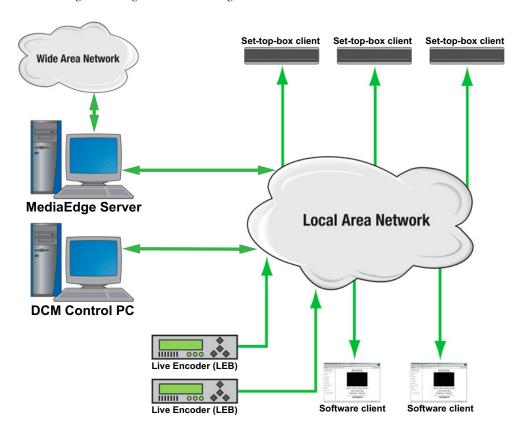


Figure 1. Single Server MediaEdge Network

Content Storage and Registration

Pre-encoded MPEG-2 (including HD) and MPEG-4 (H.264) content is stored and registered on a MediaEdge server running MediaEdge-SVS4 server software. Live footage from HDV and analog video sources can also be fed into the MediaEdge server; analog video being encoded into MPEG format in real-time via the MediaEdge-LEB video encoding device or other optional MPEG encoding solutions designed for MediaEdge.

Content Delivery

Once registered on the MediaEdge server, video content can be delivered to various PCs on the network and displayed using MediaEdge-SWT4 client software. Content can also be distributed to MediaEdge-STB4 and STB4H set-top boxes to be displayed on video boards, television monitors, LCD screens and other display devices.

A multi-site MediaEdge system is illustrated in Figure 2. In this illustration, a DCM Control PC is present in the Central MediaEdge Site. This single

instance of the DCM can manage content and digital signage layouts for all MediaEdge servers and playout devices in the MediaEdge system

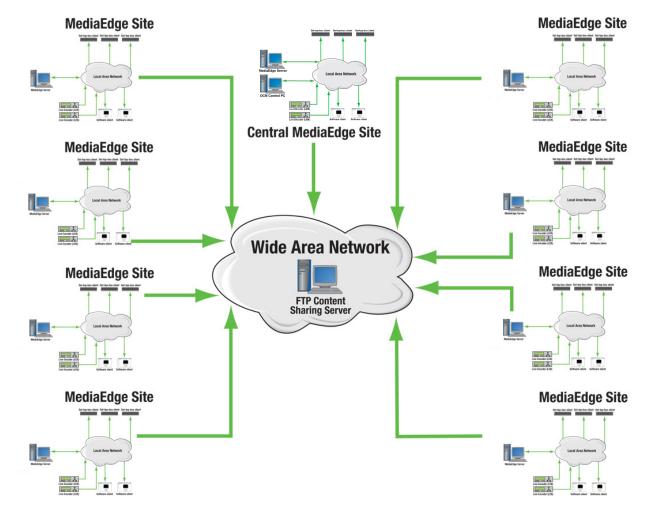


Figure 2. Multi-Site MediaEdge System

MediaEdge Streaming Capabilities

MediaEdge facilitates content delivery in the following three modes:

Video-on-Demand (VOD)

VOD client users may select video clips stored on the server for viewing, either from a dynamically updating menu, or through direct channel number selection via the remote control. The user can pause, stop and resume viewing content at any time. Content chapter points can be created for faster navigation, and clients can fast-forward or rewind video clips during playback.

Scheduled Playback

Scheduled playback allows an unlimited number of users to view a pre programmed arrangement of multiple video clips. The MediaEdge server can have multiple scheduled "channels" running simultaneously, with set program times scheduled to run hourly, daily or monthly. MediaEdge settop box users can surf channels by simply using the remote control. MediaEdge software clients have the same functionality from within a Web browser.

Live Broadcasting

MediaEdge can utilize the real-time encoding capability of MediaEdge-LEB4 encoding devices to transmit live external SD video sources such as cameras, VCRs and DVD players as professional-quality MPEG-2 or MPEG 4 (H.264) streams to multiple clients with minimal delay. With this feature, MediaEdge can retransmit externally broadcast sources such as television and satellite feeds. Such content, once MPEG encoded, may also be recorded for later viewing or scheduling. MediaEdge systems also support live streaming of HD video from HDV cameras and decks when connected to the MediaEdge server via IEEE 1394 FireWire. As with external SD video, HDV footage can be streamed live or recorded for later use.

Display Content Manager DCM Overview

The Display Content Manger is a software tool that expands the feature set of a MediaEdge system and provides support for full digital signage capabilities. Rather than simply playing video on a monitor, the DCM provides a MediaEdge system with comprehensive information delivery capabilities which include video, still images, ticker text (horizontal or vertical), time and temperature updates, news feeds, etc.

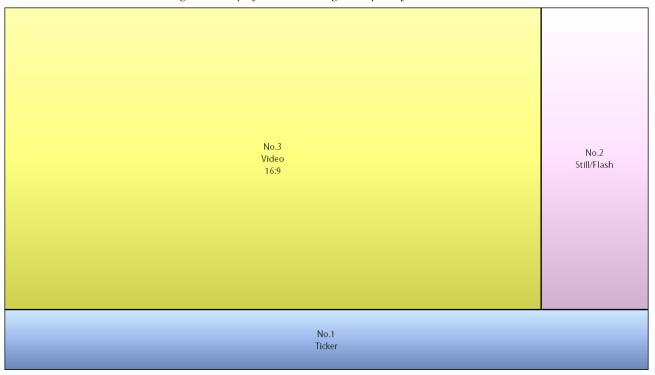
Digital Signage Layouts

A wide variety of content and multiple digital signage layouts can be managed and delivered to multiple playout devices on the MediaEdge network.

The digital signage layout shown in Figure 3 is an example of a multiple-region layout in which video, still images and scrolling ticker text are incorporated into a single display.

In this example, three display regions have been defined in which content may be displayed; however, there is no relationship between the region labels and any actual content. The same layout may be used to deliver a variety of unique content to different playout devices. Note Although the region labels in this example indicate the support for scrolling text (Ticker) and Flash animated video, both are not supported simultaneously during playout. See *Appendix A-Limitations* for more information concerning playback, scheduling and other DCM limitations.

Figure 3. Display Content Manager Sample Layout



As illustrated in Figure 4, multiple layouts can be defined and maintained within the Display Content Manager application.

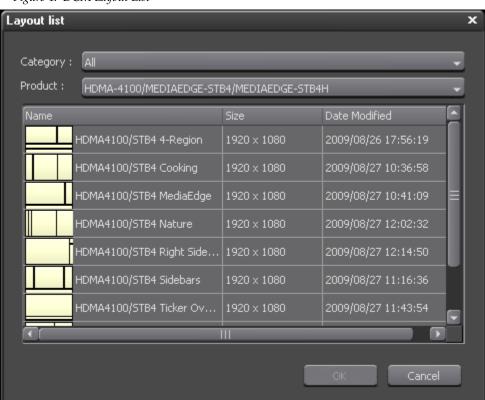


Figure 4. DCM Layout List

Layouts are organized by user-defined categories and playout devices (product).

Supported Content Types

The following content types and formats may be displayed on layout regions defined for a display monitor:

Video

MPEG-2 transport stream, MPEG-2 program stream and MPEG-4 (H.264) (.MPG, .MPEG, M2P, .M2T, .MTS, M2TS).

Still Images

JPEG, BMP, GIF (transparent GIF supported), PNG (transparent PNG supported).

Text/Ticker

TXT, RSS (may be registered as Uniform Resource Identifier [URI] material).

Flash

SWF

Note Animated Flash files up to version 7 are supported on hardware playout

devices.

QuickTime

MOV, QT, MPV, 3GP, 3GPP, 3G2.

Note Supported by MEDIAEDGE-SWT4 software client only.

HTML

HTML, HTM.

Audio

WAV (PCM: 8/16/24 bit, 1/2/5.1 ch.), MP3

Uniform Resource Identifier

Any URI

Supported Playout Devices

The following playout devices are support by the DCM:

HDMA-4000/HDMA-4100

Plays SD/HD video transferred over the network and stored on an internal hard drive.

Note HDMA-4100 is required for playback of MPEG-4 (H.264) content.

MEDIAEDGE-STB3 DS/STB4/STB4H

Set-top box that plays MPEG-2 or MPEG-4 (H.264) SD/HD content streamed from a MediaEdge server.

Note Only the STB4 and STB4H support MPEG-4 (H.264) content

MEDIAEDGE-SWT3 DS/SWT4

Software client that enables a PC to act as an SD/HD playout device.

Note Only the MediaEdge SWT4 client supports playback of QuickTime and MPEG-4 (H.264) content.

Other Notable DCM Features

Automatic Update

The DCM may be configured to update program content and schedules at specified dates and times. Manual update is possible any time.

Change Only Updates

When updating content, only the content that has changed is updated. This minimizes the amount of data sent over the network and reduces the time required to finish the updates.

DCM Installation Prerequisites

Prior to installing the DCM software, verify that the recommended operating system and other necessary software is installed on any machine on which the DCM or SVS4 server software will be installed.

Operating System

The following Windows Operating Systems and Service Pack revisions are recommended when using MediaEdge SVS4 server and DCM software:

- Windows Server 2008 with SP2 or Windows Server 2008 R2 (MediaEdge SVS4 Servers)
- Windows XP with SP3 (DCM/Control PCs)
- Windows Vista with SP2 (DCM/Control PCs)

The recommended operating system and service packs must be installed on the computer before proceeding with the installation of server software and the DCM.

Server Software

The server software explained in this section must be installed and configured prior to installing the DCM software.

Note

A server is a computer on which the server software is installed. If MediaEdge SVS4 server software is installed, the other server software components will likely be installed on the same Windows Server 2008 or Server 2008 R2 computer as the MediaEdge SVS4 software. MediaEdge SVS4 server software is not required for the DCM to be fully functional. If SVS4 software is not installed, IIS, FTP Server and Database server software may be installed on the Windows XP or Windows Vista computer that will host the DCM.

Internet Information Services (IIS)

IIS 6.0 or above is recommended. Version 6.0 or above of IIS can be installed on a computer running Windows XP, Windows Vista, Windows Server 2003, Windows Server 2008 or Windows Server 2008 R2.

Note It is recommended that IIS 7.0 and FTP Services 7.5 be installed on Windows Server 2008 or Windows Server 2008 R2.

Note The operating system installation disc may be required.

See Installing IIS and the FTP Server on page 26 for more information.

FTP Server

The content and system files (SMIL files that correspond to configured playlists and schedule files) are stored on the FTP server.

Note Read and write access permissions to the FTP content directory are required.

See FTP Server Setup on page 41 for more information.

Database Server

The database server stores Display Content Manager information.

If a new instance of SQL Server 2005 is not already present on the server or PC on which the DCM will be installed, SQL Server 2005 Express Edition will be installed by the MediaEdge-SVS4 or Display Content Manager installers.

MediaEdge Server

If using the MediaEdge-SVS4 server software, it should be installed and configured before DCM installation. See the MediaEdge SVS4 manual for instructions on installing that software.

The DCM installation will install the following MediaEdge server software:

- DCM Download Service downloads data from the FTP server according to the DCM configuration and registers data in the MediaEdge database. Uses the DCM download.txt file.
- DCM Redirect Service redirects clients according to DCM scheduled events. Uses the DCM schedule.xml file.

Note Internet Information Services, FTP Server, Database Server and MediaEdge Server can all be installed on a single computer. However, configurations in which these servers are installed on separate computers are also supported as long as the necessary connectivity and authentication between servers exists.

Installing IIS and the FTP Server

Prior to installing IIS 7.0 and FTP Services 7.5 on a Windows 2008 or Windows 2008 R2 server, verify that the Windows Firewall is disabled on all profiles by following these steps:

1. From the Start menu, select Administrative Tools>Windows Firewall with Advanced Security.

The Windows Firewall with Advanced Security dialog illustrated in Figure 5 appears.

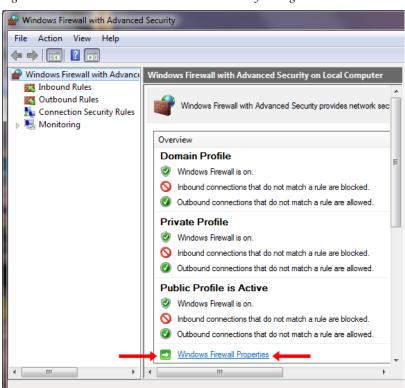


Figure 5. Windows Firewall with Advanced Security Dialog

2. Click the Windows Firewall Properties link.

The Firewall Properties Dialog shown in Figure 6 appears.

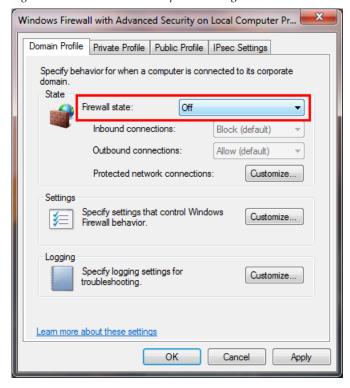


Figure 6. Windows Firewall Properties Dialog

- **3.** On the Domain Profile tab select Off from the Firewall state drop-down list (see Figure 6) and click the **Apply** button.
- **4.** Repeat the same steps on the Private Profile and Public Profile tabs.
- **5.** When the Firewall state has been set to Off on all profiles, click the **OK** button to close the Firewall Properties dialog.
- **6.** In the Windows Firewall with Advanced security dialog, verify that the firewall is Off on the Domain, Private and Public profiles as illustrated in Figure 7.

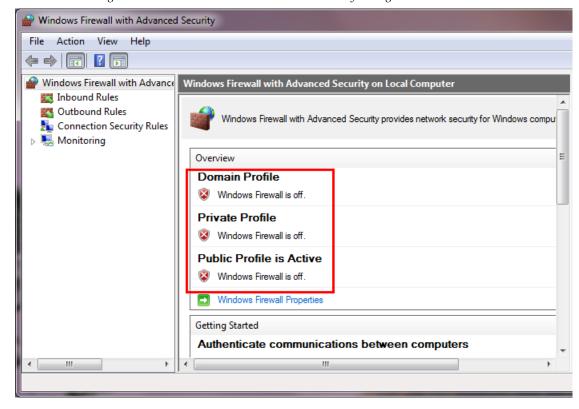


Figure 7. Windows Firewall with Advanced Security Dialog

7. If the firewall is not off on any profile, repeat Step 2 and Step 3 above on the appropriate profile tab.

With the firewall turned off on all profiles, IIS and FTP Services may be installed and configured.

To install Internet Information Services (IIS) and FTP Services, do the following:

Note These instructions apply when installing IIS 7.0 on the Windows Server 2008 R2 operating system. The procedure for other operating systems will be different. Differences when installing on Server 2008 are noted.

- 1. If the Server Manager is not already running, do one of the following to start the Server Manager:
- Click the Server Manager icon in the taskbar.



• From the Start menu, select Administrative Tools>Server Manager.

The Server Manager shown in Figure 8 appears.

2. Select Roles from the Server Manager options on the left.

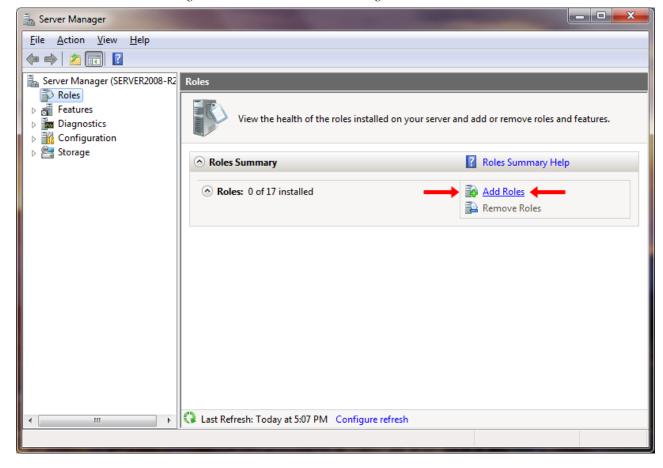


Figure 8. Server 2008 R2 - Server Manager - Roles

- **3**. From the Roles dialog, click the Add Roles link as shown in Figure 8.
- **4.** The Before you Begin dialog illustrated in Figure 9 appears.

× Add Roles Wizard **Before You Begin** Before You Begin This wizard helps you install roles on this server. You determine which roles to install based on Server Roles the tasks you want this server to perform, such as sharing documents or hosting a Web site. Confirmation Before you continue, verify that: Progress • The Administrator account has a strong password Results • Network settings, such as static IP addresses, are configured • The latest security updates from Windows Update are installed If you have to complete any of the preceding steps, cancel the wizard, complete the steps, and then run the wizard again. To continue, click Next. Skip this page by default < Previous Next > Install Cancel

Figure 9. Before You Begin Dialog

Note If the Skip this page by default option was selected during a previous role installation, this dialog may not appear.

- **5.** Click the **Next** button to continue.
- **6.** The Select Server Roles dialog illustrated in Figure 10 appears.

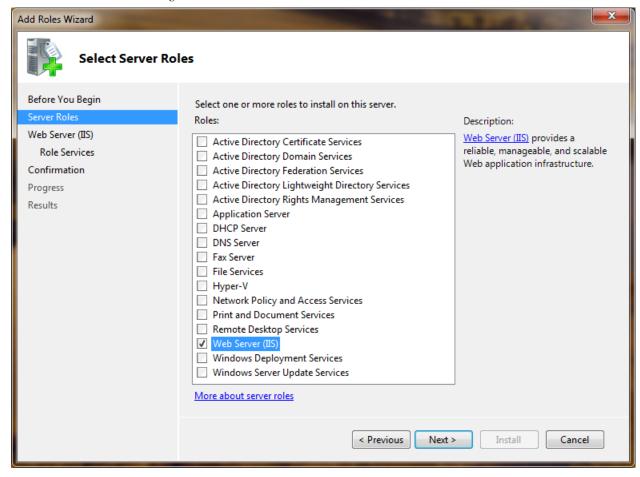
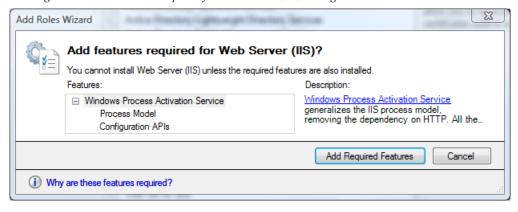


Figure 10. Server 2008 R2 - Server Roles

7. Select the Web Server (IIS) role.

If installing IIS on Server 2008, the Add features required for Web Server (IIS) dialog depicted in *Add Features Required for Web Server (IIS)*DialogFigure 11 may appear. If it does, click the **Add Required Features** button.

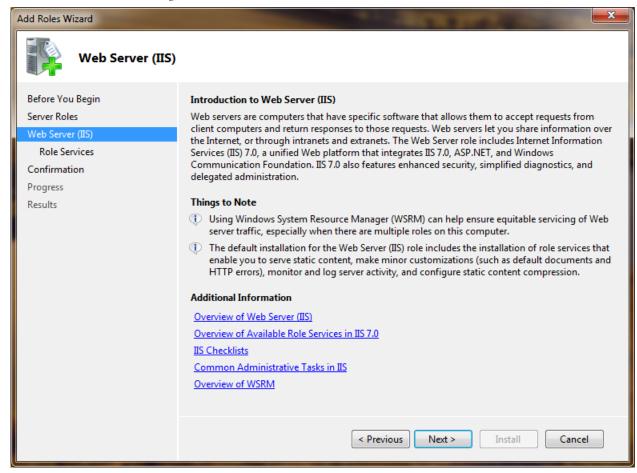
Figure 11. Add Features Required for Web Server (IIS) Dialog



8. Click the Next button.

The Web Server (IIS) dialog illustrated in Figure 12 appears.

Figure 12. Server 2008 R2 - Web Server (IIS)



9. Click the Next button.

The Select Role Services dialog shown in Figure 13 appears.

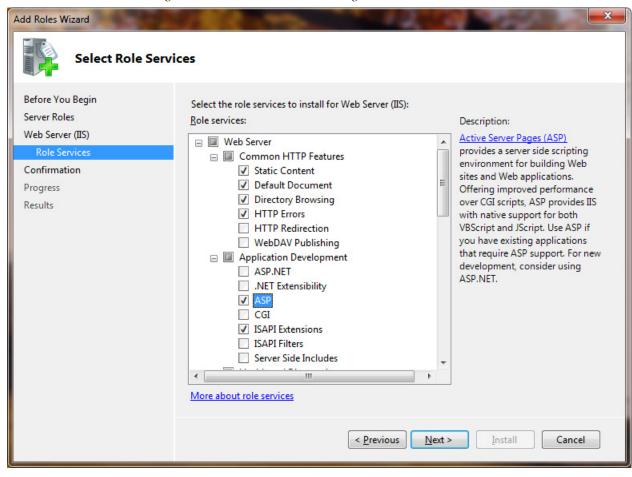


Figure 13. Server 2008 R2 Server Manager - Select Role Services

10. In the Application Development section, select ASP.

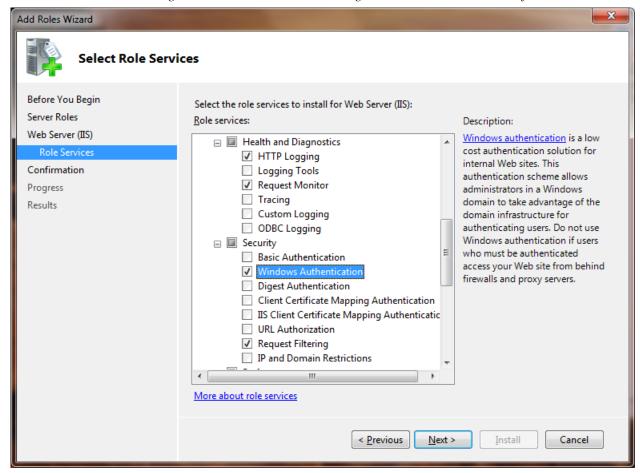
The Add role services required for ASP? dialog illustrated in Figure 14 appears.

Figure 14. Add ASP Services



- **11.** Click the **Add Required Role Services** button to add the required ASP services.
- **12**. From the Select Role Services dialog, select the following additional services:
- Windows Authentication in the Security section (see Figure 15).

Figure 15. Server 2008 R2 Server Manager - Select Role Services - Security



- IIS Management Console in the Management Tools section (see Figure 16).
- FTP Server if installing IIS 7.0 on Windows Server 2008 R2 (see Figure 16).

Note If installing IIS on Server 2008, do not select the FTP Publishing Service, FTP Server and FTP Management Console options. Selecting these options will install FTP Services version 6. To Install FTP Services version 7.5 see Install FTP Services 7.5 for IIS 7.0 on Windows Server 2008 on page 37.

Note Services other than those specifically named above will also be selected.

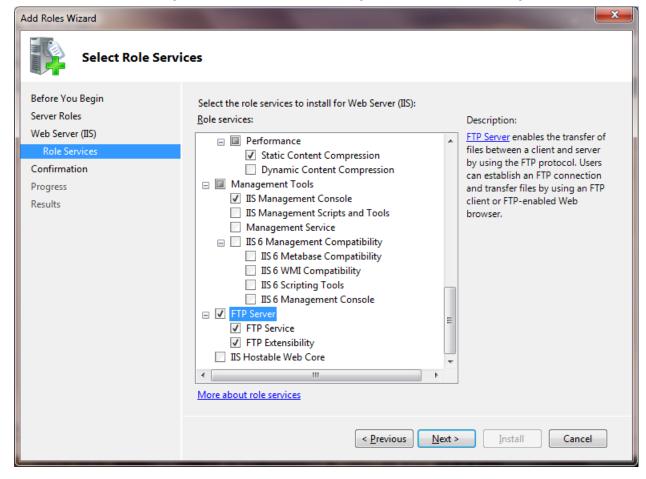


Figure 16. Server 2008 R2 Server Manager - Select Role Services - Management Tools and FTP

13. Click the **Next** button to proceed when all the necessary services have been selected.

The Confirm Installation Selections dialog shown in Figure 17 appears.

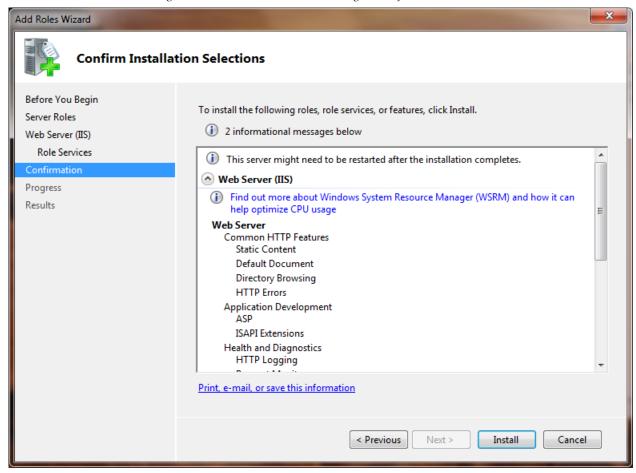


Figure 17. Server 2008 R2 Server Manager - Confirm Installation Selections

- **14.** Review the selections and click the **Install** button to proceed with the installation of the selected server role services.
- **15.** When installation is complete, the Installation Results dialog illustrated in Figure 18 appears.

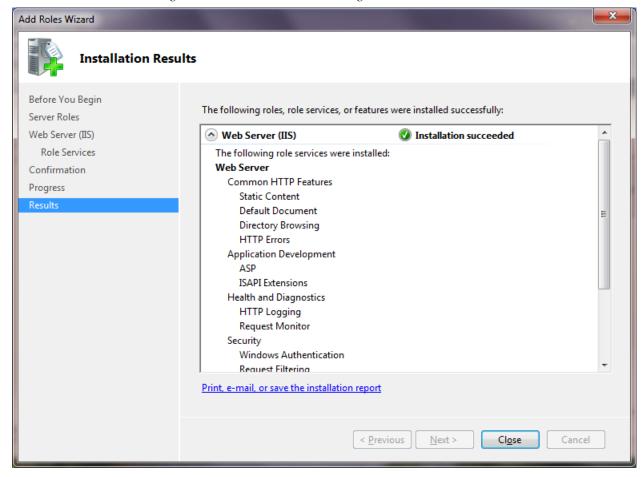


Figure 18. Server 2008 R2 Server Manager - Installation Results

16. Click the **Close** button on the Installation Results dialog.

IIS 7.0 and FTP Services version 7.5 have been installed on Windows Server 2008 R2.

Proceed to FTP Server Setup on page 41.

Install FTP Services 7.5 for IIS 7.0 on Windows Server 2008

FTP Services 7.5 for IIS 7.0 may be downloaded from http://www.microsoft.com/downloads. Be sure to download the version that corresponds to the version of Windows Server 2008 on which it will be installed; ftp7_x86_75 for 32-bit systems and ftp7_x64_75 for 64-bit systems.

Note This file will install FTP Services 7.5 on Windows Server 2008 only. It will not install on Windows Server 2008 R2. FTP Services version 7.5 can be installed on Windows Server 2008 R2 via the Server Manager Add Roles procedure documented above.

To install FTP Service 7.5 for IIS 7.0 on Windows Server 2008, do the following:

1. Double click the downloaded FTP Services installation file to begin the installation.

The Welcome screen illustrated in Figure 19 appears.

Figure 19. FTP Service 7.5 Install Welcome Screen



2. Click the **Next** button on the Welcome screen.

The License Agreement screen shown in Figure 20 appears.

End-User License Agreement
Please read the following license agreement carefully

MICROSOFT SOFTWARE SUPPLEMENT
LICENSE TERMS

MICROSOFT FTP SERVICE 7.5 FOR IIS 7.0

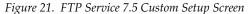
PLEASE NOTE: Microsoft Corporation (or based on where you live, one of its affiliates) licenses this supplement to you. You may use it with

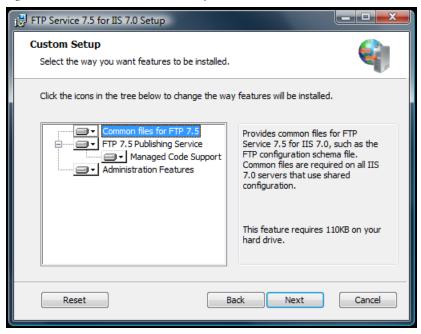
Occupant of Microsoft Microsoft Windows Songer 2009 (the

Figure 20. FTP Service 7.5 License Agreement Screen

3. On the End-User Licence Agreement screen, check the I accept the terms of the License Agreement box and click the **Next** button.

The Custom Setup screen depicted in Figure 21 appears.





4. On the Custom Setup screen, click the **Next** button without changing any of the default installation settings.

The Ready to Install screen illustrated in Figure 22 appears.

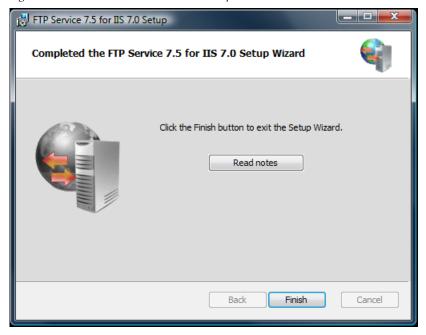
Figure 22. FTP Service 7.5 Ready to Install Screen



5. On the Ready to Install FTP Service screen, click the **Install** button.

When the installation is complete, the Completed screen shown in Figure 23 appears.

Figure 23. FTP Service 7.5 Installation Completed



6. Click the **Finish** button to exit the Setup Wizard.

FTP Services 7.5 for IIS 7.0 is now installed on Server 2008.

Proceed to FTP Server Setup.

FTP Server Setup

The instructions which follow document the process of configuring the FTP Server to work with the DCM.

Note

The FTP server configuration procedures documented in this section may differ depending upon the installed operating system. The instructions here depict Windows Server 2008 R2 screens.

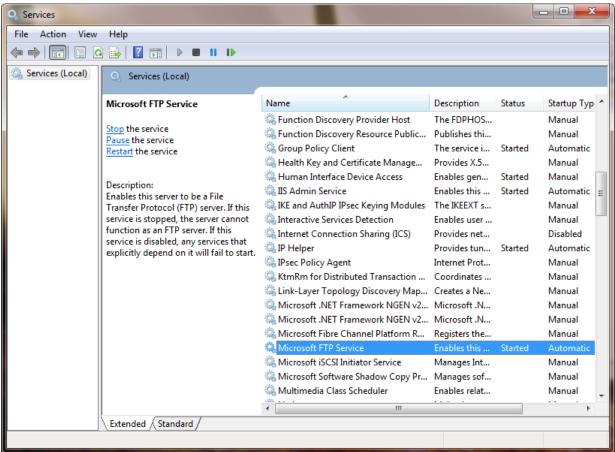
Verify Startup Type

Before beginning FTP server setup, verify that the Microsoft FTP Service is set to automatic startup. To set the startup type, do the following:

1. From the Start menu, select Start>Administrative Tools>Services.

The Services dialog illustrated in Figure 24 appears.

Figure 24. Services Dialog.



2. If the Microsoft FTP Service startup type is not Automatic, right click on the service and select Properties from the menu as illustrated in Figure 25.

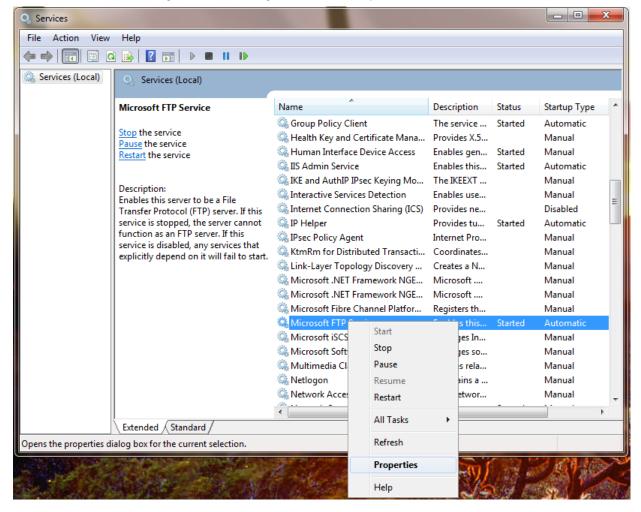


Figure 25. Services Right-Click Menu - Properties

3. Select Automatic from the Startup Type drop-down list as shown in Figure 26.

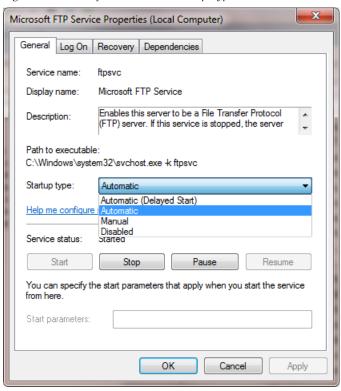


Figure 26. Microsoft FTP Service Startup Type Selection

- **4.** If the FTP Service is not started, click the **Start** button to start the service.
- **5.** Click the **0K** button to close the dialog and set the Microsoft FTP Service startup type to automatic.

Configure the FTP Server

To configure the FTP server, do the following.

1. From the Start menu, select Administrative Tools>Internet Information Services (IIS) Manager

The IIS Manager dialog shown in Figure 27 appears.

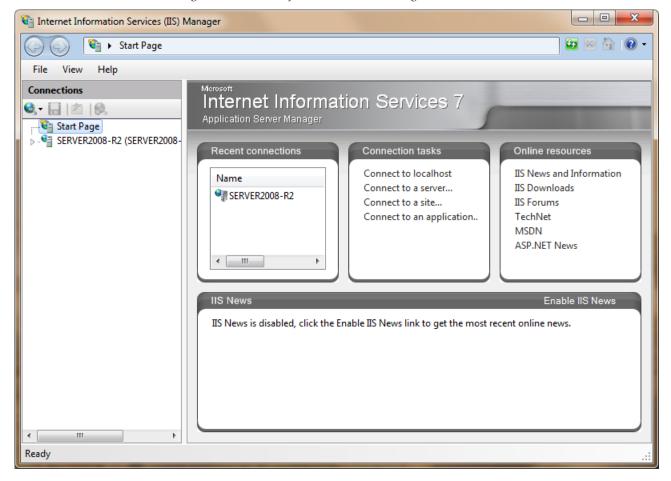


Figure 27. Internet Information Services Manager

- **2.** Click on the computer name to expand the tree.
- **3.** Right click on Sites and select Add FTP Site from the menu as illustrated in Figure 28.

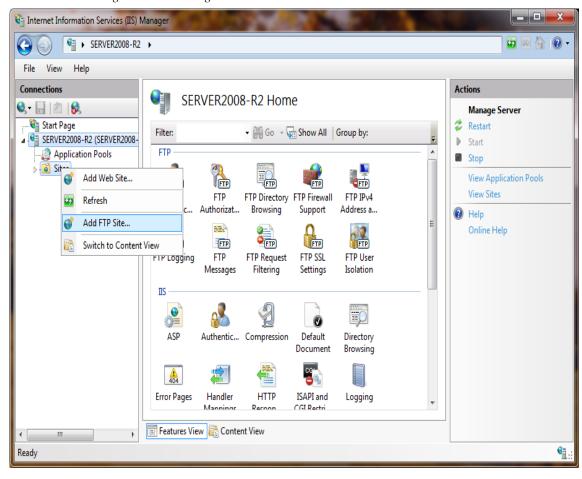


Figure 28. IIS Manager - Add FTP Site

The Site Information dialog shown in Figure 29 appears.

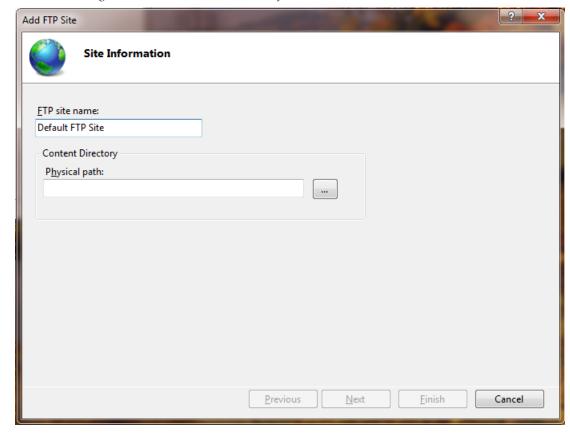


Figure 29. IIS - Add FTP Site - Site Information

- **4.** Enter the desired FTP site name (for example: Default FTP Site).
- **5.** Click the ... button to browse for or create a folder for FTP site content directory.
- **6.** Select an existing folder or click the **Make New Folder** button to create a folder for the DCM FTP content directory as illustrated in Figure 30.

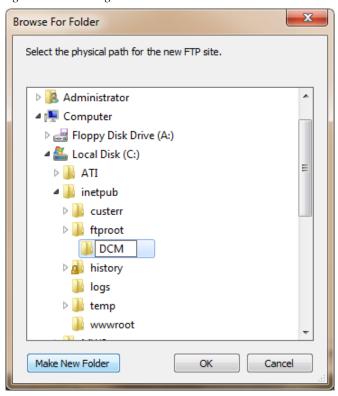


Figure 30. IIS Manager -Add FTP Site - Make New Folder

Note If you wish to create an FTP upload directory specifically for the DCM, create the folder under the ftproot folder.

7. Click the **OK** button to select the specified folder as the FTP content directory.

The FTP Site Information dialog appears with the specified FTP site name and content directory path as shown in Figure 31.

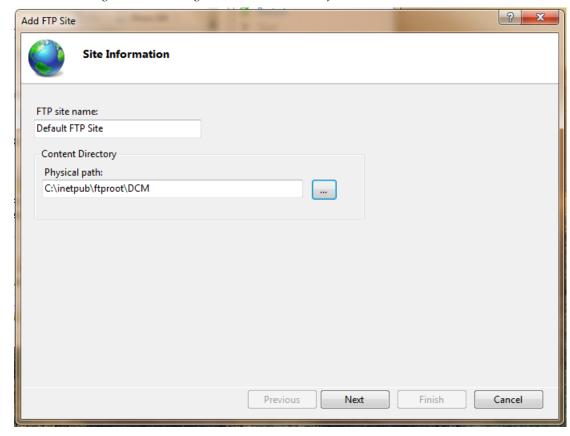


Figure 31. IIS Manager - Add FTP Site - Site Information

8. Click the **Next** button to continue.

The Binding and SSL Settings dialog illustrated in Figure 32 appears.

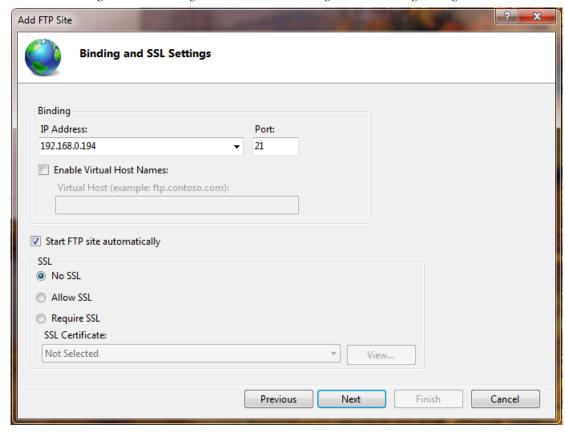


Figure 32. IIS Manager - Add FTP Site - Bindings and SSL Settings Dialog

- **9.** Specify the Binding and SSL information as follows:
- Desired IP address for the FTP server from the drop-down list
- FTP port number (default = 21)
- Enable Virtual Host Names: not selected
- Start FTP site automatically: selected
- SSL: No SSL
- 10. Click the Next button to continue.

The Authentication and Authorization Information dialog illustrated in Figure 33 appears.

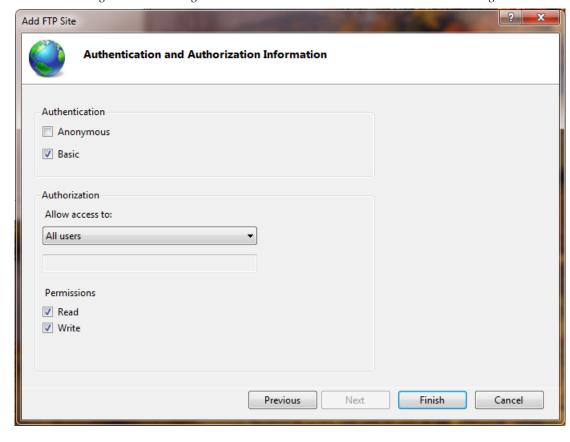


Figure 33. IIS Manager - Add FTP Site - Authentication and Authorization Dialog

- **11.** Select the following Authentication and Authorization settings:
 - Authentication: Basic
 - Authorization: All users
 - Permissions: Read and Write selected.
- **12.** Click the Finish button to create the FTP site with the specified settings.

As shown in Figure 34, the new FTP site appears in the IIS Manager.

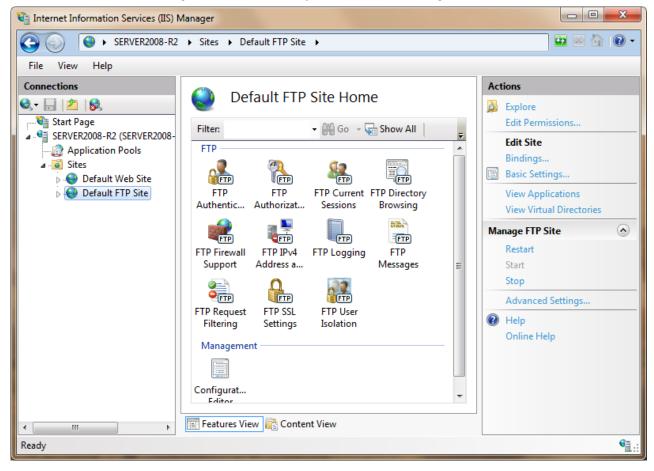


Figure 34. Virtual Directory Access Permissions Dialog

13. Close the Internet Information Services (IIS) Manager.

FTP Server setup is complete.

DCM Software Installation

This section describes the installation of the MediaEdge Display Content Manager (DCM) software only. For detailed information regarding the installation of MediaEdge-SVS4 Server software, see the MediaEdge-SVS4 User's Guide.

Note The Status Monitor application is installed with the DCM. Configuration and use of the Status Monitor is not covered in this documentation.

MediaEdge video content managed by the Display Content Manager can be mixed HD and SD and that same content may be managed and delivered to one or more displays as shown in Figure 35 on page 55 and Figure 50 on page 66.

Software Prerequisites

Prior to installing the DCM software, verify that the recommended operating system and other necessary software is installed on any machine on which the DCM will be installed. See *DCM Installation Prerequisites on page 24* for more information.

Operating System

The following Windows Operating Systems and Service Pack revisions are recommended when using MediaEdge SVS4 server and DCM software:

- Windows Server 2008 with SP2 or Windows Server 2008 R2 (MediaEdge SVS4 Servers)
- Windows XP with SP3 (DCM/Control PCs)
- Windows Vista with SP2 (DCM/Control PCs)

Other Software

Before proceeding with the DCM software installation, verify that Internet Information Services (IIS) and an FTP server are properly installed and configured on your MediaEdge server or desktop PCs.

See *Server Software on page 24* for more information on installing and configuring IIS and the FTP server.

If needed, SQL Server 2005 Express Edition will be installed by the MediaEdge-SVS4 or Display Content Manager installers.

Configurations Without MEDIAEDGE-SVS4

If no MediaEdge-SVS4 Server is used, all Display Content Manager components (DCM Console, DCM Status Monitor, and Digital Signage DB) may be installed on one or more PCs.

Note The MediaEdge-DS Feature Expansion is installed on a SVS4 server only.

In this configuration, any of the following client devices may be used for content playback:

- HDMA-4000/HDMA-4000Sync/HDMA-4100
- MediaEdge SWT3-DS or MediaEdge SWT4 (software client operates as browser plug-in)

A sample configuration with no MediaEdge SVS4 server and the HDMA-4100 playback device is illustrated in Figure 35.

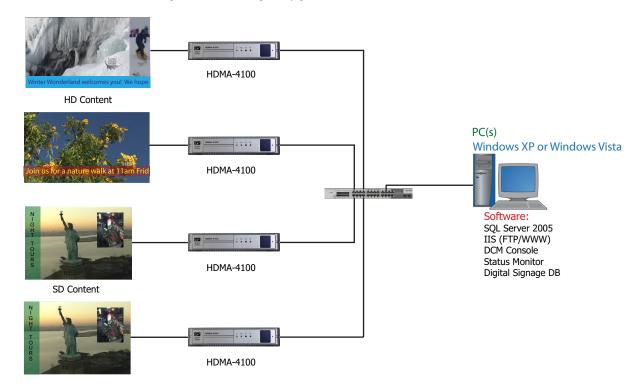


Figure 35. MediaEdge Configuration with no SVS4 Server

Installation of the DCM Software on a PC

To install all components of the Display Content Manager on a PC on which IIS has been configured with FTP and WWW services, follow these steps:

To install the DCM software, do the following:

1. Insert the DCM software DVD into a DVD drive on the computer on which you wish to install the DCM client software.

The installation program will launch automatically and, after a few moments preparing the installation, the welcome screen shown in Figure 36 appears.

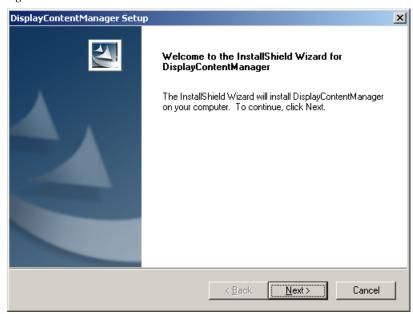


Figure 36. DCM Installation Welcome Screen

Note If the installation program does not start automatically, in Windows Explorer double click the drive letter of the DVD drive (e.g. D:), open the DCM Install folder and double click setup.exe. Alternatively, you may select Start>Run and enter the following: D:\DCM Install\setup.exe where D: is replaced by the

actually drive letter of the DVD drive containing the DCM installation disc.

- **2.** Click the **Next** button to proceed with the installation.
- **3**. The Choose Destination Location dialog illustrated in Figure 37 appears.

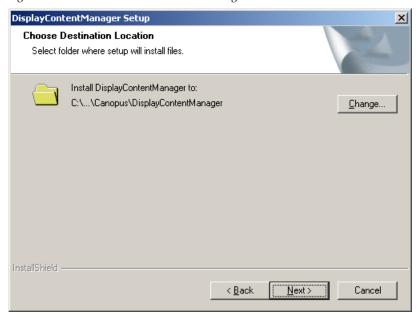


Figure 37. Choose Destination Location Dialog

A default installation location (C:\Program Files\Canopus\DisplayContentManager) is suggested. If you wish to accept this installation location, proceed to Step 6.

4. If desired, click the **Change** button to select an installation folder other than the default. The Choose Folder dialog illustrated in Figure 38 appears.

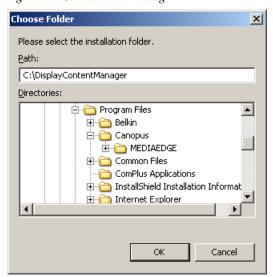


Figure 38. Choose Folder Dialog

5. Navigate to an existing folder in which you wish to install the DCM and click the **0K** button to close the dialog.

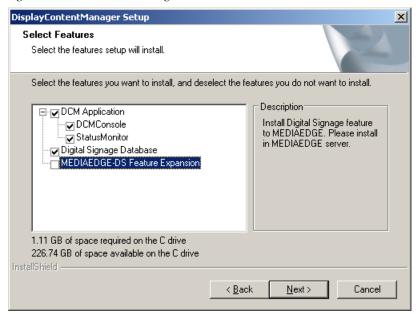
Note A new folder cannot be created from this dialog. If you wish to install the DCM in a folder other than the default, the folder must be created before opening the Choose Folder dialog.

6. Click the **Next** button.

The Select Features Dialog shown in Figure 39 appears.

Note By default, all DCM features are selected.

Figure 39. Select Features Dialog



7. Deselect the MEDIAEDGE-DS Feature Expansion and click the **Next** button.

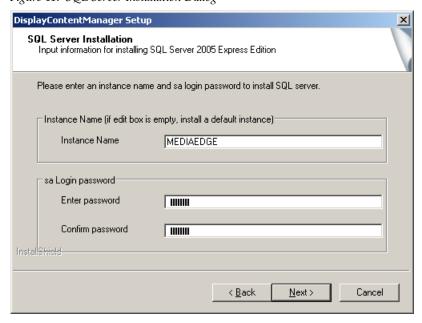
The SQL Server Instance Selection dialog illustrated in Figure 40 appears. The Install SQL Server 2005 Express Edition Now radio button is selected.

Figure 40. SQL Server Instance Selection Dialog

8. Click **Next** to install SQL Server 2005 Express Edition.

The SQL Server Installation dialog shown in Figure 41 appears.

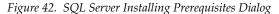
Figure 41. SQL Server Installation Dialog

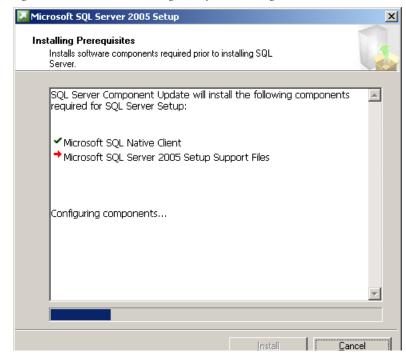


9. Enter the desired SQL Server Instance Name and login password as illustrated in Figure 41.

- Note Generally, in a Windows authenticated network, the sa login password is not needed; however, in small networks without a domain controller and Windows authentication to all networked computers, the sa login password may be needed to access the DCM database.
- **10.** Click **Next** to begin the SQL Server installation and instance creation process.

The SQL Server Installing Prerequisites dialog shown in Figure 42 and the SQL Server Setup Progress dialog shown in Figure 43 appear during the SQL Server installation process.





X

Browse..

Cancel

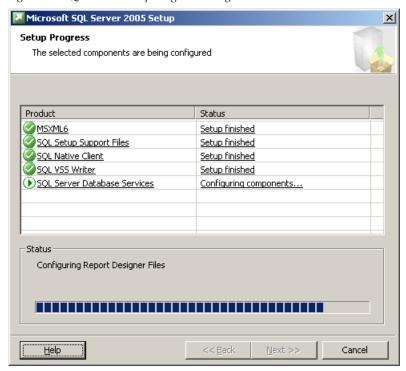


Figure 43. SQL Server Setup Progress Dialog

When the SQL Server 2005 Express Edition setup is complete, the Select Materials Path dialog illustrated in Figure 44 appears.

< <u>B</u>ack

Next>



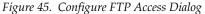
Figure 44. Select Materials Path Dialog

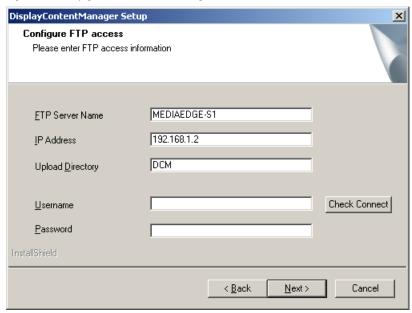
C:\inetpub\ftproot\DCM

11. Enter the folder path or click on the **Browse** button to browse for the desired folder in which MediaEdge material (assets, content) are stored on the server. These are the assets to be managed by the DCM.

Note In order to save disk space, it is recommended that the material (asset) path be the same as the folder specified as the FTP content directory. See *Configure the FTP Server on page 44* for more information.

The Configure FTP Access dialog shown in Figure 45 appears.





The FTP Server Name field will display the name of the Computer on which the FTP server is installed.

Note This is the computer name on which the DCM is being installed as all components are installed and configured on the same computer in this scenario.

- 12. Enter the FTP Server IP address in the IP Address field.
- **13.** Enter the FTP Upload directory alias specified during FTP Server setup (see *Configure the FTP Server on page 44* for more information) in the Upload Directory field.
- **14**. Click the **Check Connect** button to verify the connection to the FTP Server.

If the connection information is correct, the confirmation in Figure 46 appears.

Figure 46. FTP Server Connection Succeeded



If the FTP Server connection fails, the information dialog in Figure 47 appears.

Figure 47. FTP Server Connection Failed



If the connection fails, verify the server name, IP address and FTP directory alias and check the connection again until the FTP connection is successful.

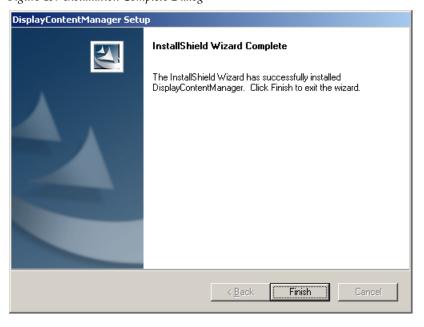
- **15.** Click the **OK** button to close the information dialog.
- **16.** Click the **Next** button.

The Ready to Install dialog shown in Figure 48 appears.

Figure 48. Ready to Install the Program Dialog

17. Click the Install button to install the selected features.
Various status messages will appear during the installation.
When installation is complete, the dialog in Figure 49 appears.

Figure 49. Installation Complete Dialog



18. Click the **Finish** button to finish the installation.

Configurations Using MEDIAEDGE-SVS4

The Display Content Manager (DCM) software may be installed on the same computer as the MediaEdge server software or on a separate client machine. The choice as to where to install DCM components depends upon your MediaEdge network topology and usage requirements.

Note

A single instance of the DCM software can manage the content for one or more MediaEdge servers. A separate DCM instance is not needed for each MediaEdge server.

The computer on which the DCM client software is installed is referred to as the Control PC.

Before beginning the DCM installation, determine where you wish to install the DCM client software. If the DCM will be installed on a separate Control PC, the software installation is a two-step process involving the Control PC and the MediaEdge SVS4 server(s). Begin with the MediaEdge SVS4 server(s).

Figure 50 depicts a MediaEdge system in which there is one MediaEdge Server and one control PC managing the content for four set top boxes and their output displays.

In this configuration, any of the following client devices may be used for content playback:

- HDMA-4000/HDMA-4000Sync/HDMA 4100
- MediaEdge-STB3-DS/STB4/STB4H
- MediaEdge SWT3-DS/SWT4 (software client operates as browser plug-in)

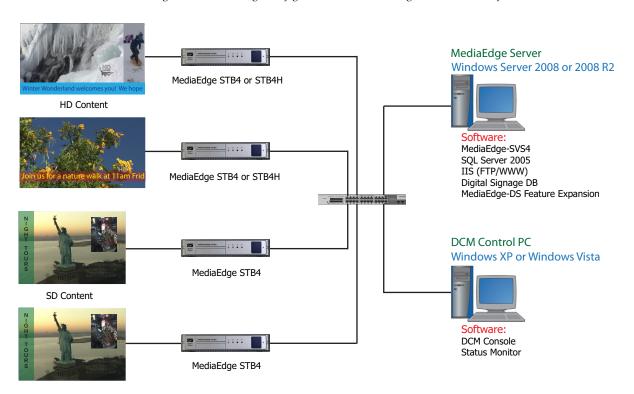


Figure 50. MediaEdge Configuration with MediaEdge-SVS4 Server Software

Common Installation Procedures

To install the DCM software, do the following:

1. Insert the DCM software DVD into a DVD drive on the computer on which you wish to install the DCM client software. As explained above, this can be a separate Control PC or on the same computer as an instance of the MediaEdge SVS4 Server.

Note If installing the DCM software on a separate control PC, begin the installation on the MediaEdge SVS4 server(s).

The installation program will launch automatically and, after a few moments preparing the installation, the welcome screen shown in Figure 51 appears.

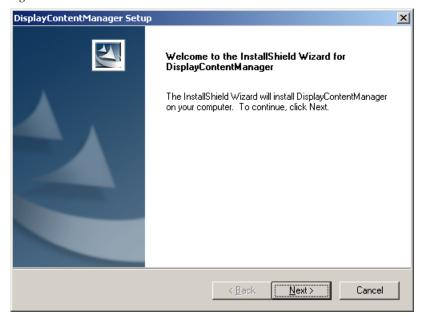


Figure 51. DCM Installation Welcome Screen

Note

If the installation program does not start automatically, in Windows Explorer double click the drive letter of the DVD drive (e.g. D:), open the DCM Install folder and double click setup.exe. Alternatively, you may select Start>Run and enter the following: D:\DCM Install\setup.exe where D: is replaced by the actually drive letter of the DVD drive containing the DCM installation disc.

- **2.** Click the **Next** button to proceed with the installation.
- **3.** The Choose Destination Location dialog illustrated in Figure 52 appears.

Figure 52. Choose Destination Location Dialog

A default installation location (C:\Program Files\Canopus\DisplayContentManager) is suggested. If you wish to accept this installation location, proceed to Step 6.

4. If desired, click the **Change** button to select an installation folder other than the default. The Choose Folder dialog illustrated in Figure 53 appears.

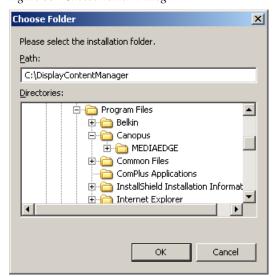


Figure 53. Choose Folder Dialog

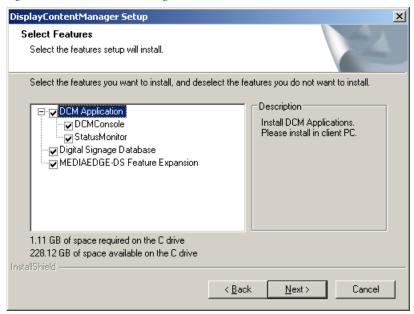
5. Navigate to an existing folder in which you wish to install the DCM and click the **0K** button to close the dialog.

Note A new folder cannot be created from this dialog. If you wish to install the DCM in a folder other than the default, the folder must be created before opening the Choose Folder dialog.

6. Click the **Next** button.

The Select Features Dialog shown in Figure 54 appears.

Figure 54. Select Features Dialog



By default, all DCM features are selected.

Client component installation options are as follows:

Install All DCM Components on MediaEdge Server

If installing the DCM software on the same computer as a MediaEdge SVS4 server, all DCM components should be selected as illustrated in Figure 54. Proceed to *Installation of All DCM Components on MediaEdge Server on page 80* for instructions for performing this installation.

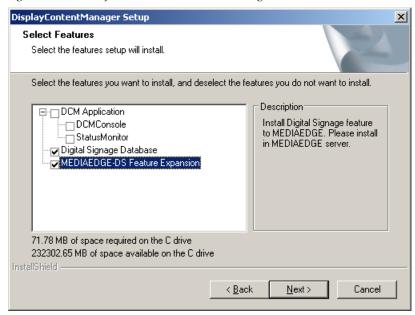
Install DCM on Separate Control PC

If the DCM client software will be installed on a separate Control PC that is not hosting the MediaEdge SVS4 server, the client software is installed in two steps.

1. Install the Digital Signage Database and MEDIAEDGE-DS Feature Expansion on the MediaEdge Server as illustrated in Figure 55. See *Partial DCM Installation on Server on page 71*

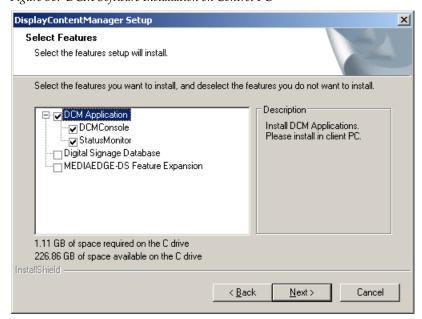
Note Deselect the DCM Application (this deselects the DCM Console and Status Monitor).

Figure 55. DCM Software Installation on MediaEdge Server



2. Install the DCM Application only on the Control PC. Deselect the Digital Signage Database and MEDIAEDGE-DS Feature Expansion as illustrated in Figure 56. See *Installation of DCM Client on Control PC on page 76*.

Figure 56. DCM Software Installation on Control PC

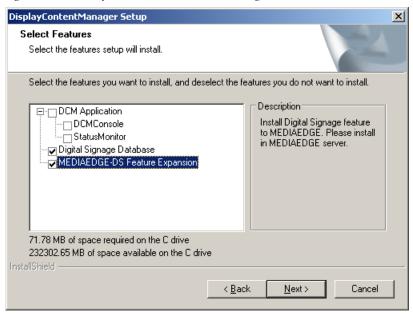


Partial DCM Installation on Server

After beginning the installation by following the *Common Installation Procedures on page 66*, follow these steps to continue with the installation of the Digital Signage Database and MEDIAEDGE-DS Feature Expansion on the MediaEdge server:

1. Deselect the DCM Application in the Select Features dialog as shown in Figure 57.

Figure 57. DCM Software Installation on MediaEdge Server



2. Click the **Next** button to continue with the installation.

The SQL Server Instance Selection dialog illustrated in Figure 58 appears.

DisplayContentManager Setup

Instance Selection
Microsoft SQL Server 2005 is needed for installing DisplayContentManager

please select SQL Server instance to install DisplayContentManager database.

install SQL Server 2005 Express Edition Now.

use installed SQL Server instance .
please select an instance to make database for DisplayContentManager.

Microsoft SQL Server 2005 Express Edition (MEDIAEDGE)

Instal

⟨ Back Next > Cancel

Figure 58. SQL Server Instance Selection Dialog

The SQL instance created during installation of the server software will be highlighted and the "use installed SQL Server instance" radio button is selected.

3. Click the **Next** button to proceed with the installation using the installed SQL Server instance.

The Initialize Database dialog illustrated in Figure 59 appears.

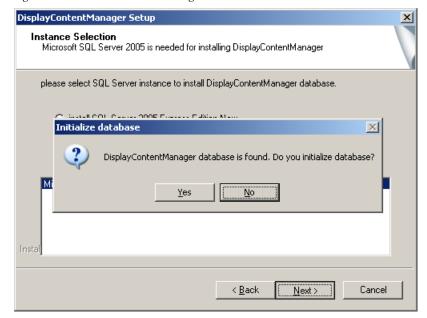
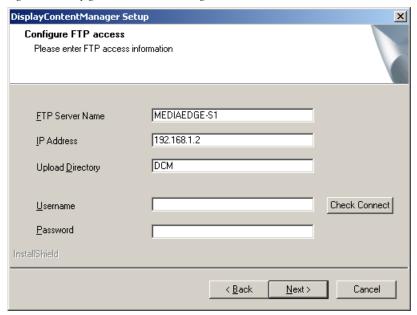


Figure 59. Initialize Database Dialog

4. Click the **Yes** button to initialize the database for the DCM and continue the installation.

The Configure FTP Access dialog shown in Figure 60 appears.

Figure 60. Configure FTP Access Dialog



The FTP Server Name field will display the name of the MediaEdge server.

- 5. Enter the FTP Server IP address in the IP Address field
- **6.** Enter the FTP Upload directory alias specified during FTP Server setup (see *Configure the FTP Server on page 44* for more information) in the Upload Directory field.
- 7. Click the **Check Connect** button to verify the connection to the FTP Server.

If the connection information is correct, the confirmation in Figure 61 appears.

Figure 61. FTP Server Connection Succeeded



If the FTP Server connection fails, the information dialog in Figure 62 appears.

Figure 62. FTP Server Connection Failed

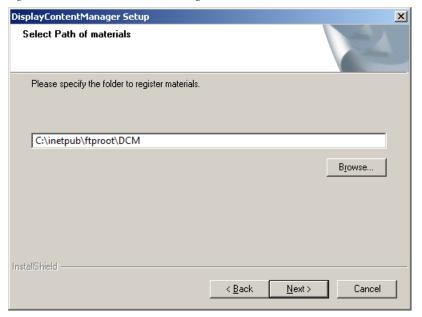


If the connection fails, very the server name, IP address and FTP directory alias and check the connection again until the FTP connection is successful.

- **8.** Click the **OK** button to close the information dialog.
- **9.** Click the **Next** button.

The Select Materials Path dialog illustrated in Figure 63 appears.

Figure 63. Select Materials Path Dialog



10. Enter the folder path or click on the **Browse** button to browse for the desired folder in which MediaEdge material (assets, content) are stored on the server. These are the assets to be managed by the DCM.

Note In order to save disk space, it is recommended that the material (asset) path be the same as the folder specified as the FTP content directory (see *Configure the FTP Server on page 44* for more information).

11. Click the **Next** button.

The Ready to Install dialog shown in Figure 64 appears.

Figure 64. Ready to Install the Program Dialog

12. Click the **Install** button to install the selected features.

Various status messages such as those illustrated in Figure 65 may appear during the installation process.

Figure 65. Installation Status Messages



When installation is complete, the dialog in Figure 66 appears.

InstallShield Wizard Complete

The InstallShield Wizard has successfully installed DisplayContentManager. Click Finish to exit the wizard.

Figure 66. Installation Complete Dialog

- **13.** Click the **Finish** button to finish the installation.
- **14.** Proceed to the next section to install the DCM client software on the Control PC.

Installation of DCM Client on Control PC

The DCM client software is installed on the Control PC after installing the Digital Signage Database and MEDIAEDGE-DS Feature Expansion on the MediaEdge SVS4 server(s). Follow the steps outlined in *Common Installation Procedures on page 66* and *Partial DCM Installation on Server on page 71* before proceeding with the DCM client installation on the Control PC.

To install the DCM client software on the Control PC, follow these steps:

Note The installation procedures is identical regardless of Windows operating system. The screens shown in this procedure are Windows XP screens.

- **1.** Follow the steps in the *Common Installation Procedures on page 66* until the Select Features dialog appears.
- 2. Select the DCM application only. Make sure the Digital Signage and MEDIAEDGE-DS Feature Expansion are deselected as shown in Figure 67.

Select Features
Select the features setup will install.

Select the features you want to install, and deselect the features you do not want to install.

Description
Install DCM Applications.
Please install in client PC.

Digital Signage Database
MEDIAEDGE-DS Feature Expansion

O.00 MB of space required on the C drive
3964.09 MB of space available on the C drive
InstallShield

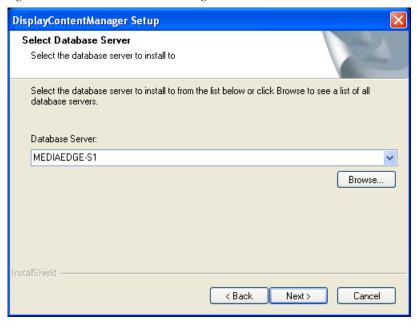
ABack Next > Cancel

Figure 67. Select Features Dialog -DCM Application Only

3. Click the Next button.

The Select Database Server dialog illustrated in Figure 68 appears.

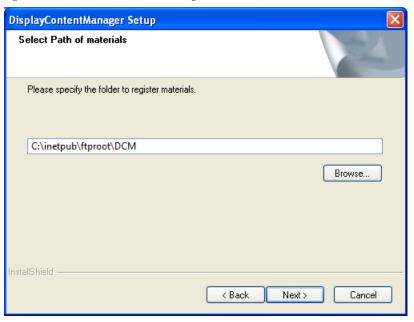
Figure 68. Select Database Server Dialog



- **4.** Enter the name of the desired database server or use the **Browse** button to locate all available database server.
- 5. Click the **Next** button to continue.

The Select Materials Path dialog illustrated in Figure 69 appears.

Figure 69. Select Materials Path Dialog

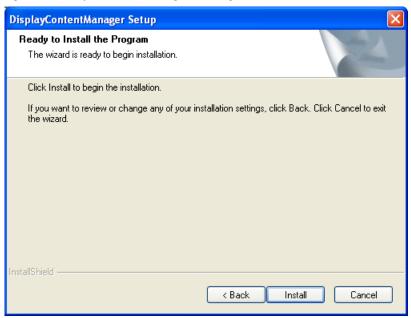


Enter the folder path or click on the **Browse** button to browse for the desired folder in which MediaEdge material (assets, content) are stored on the server. These are the assets to be managed by the DCM.

6. Click the **Next** button to continue.

The Ready to Install dialog shown in Figure 70 appears.

Figure 70. Ready to Install the Program Dialog



7. Click the **Install** button to install the selected features.

Status messages such as those shown in Figure 71 may appear during the installation.

Figure 71. Installation Status Messages



When installation is complete, the dialog in Figure 72 appears.

InstallShield Wizard Complete
The InstallShield Wizard has successfully installed
DisplayContentManager. Click Finish to exit the wizard.

Figure 72. Installation Complete Dialog

8. Click the **Finish** button to finish the installation of the DCM Client software on the Control PC.

Installation of All DCM Components on MediaEdge Server

If desired, all DCM components may be installed on the computer hosting the MediaEdge SVS4 Server; although, typically, it is preferable to install the DCM on a separate Control PC.

To install the DCM on the MediaEdge SVS4 Server, do the following:

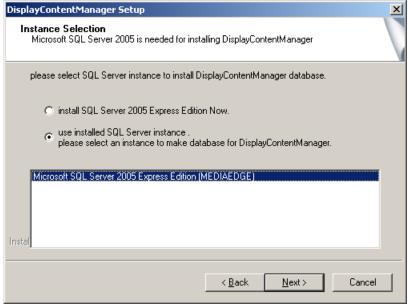
1. Follow the *Common Installation Procedures on page 66* until the Select Features dialog illustrated in Figure 73 appears.

DisplayContentManager Setup X Select Features Select the features setup will install. Select the features you want to install, and deselect the features you do not want to install. Description □ □ DCM Application ☑ DCMConsole Install DCM Applications. Please install in client PC. StatusMonitor 🕡 Digital Signage Database MEDIAEDGE-DS Feature Expansion 1.11 GB of space required on the C drive 228.12 GB of space available on the C drive k <u>B</u>ack Next> Cancel

Figure 73. DCM Select Features Dialog

- **2.** As shown in Figure 73, select for installation all DCM Application options, the Digital Signage Database and the MediaEdge-DS Feature Expansion.
- 3. Click the **Next** button to continue.
- **4.** The Instance Selection dialog illustrated in Figure 74 appears.

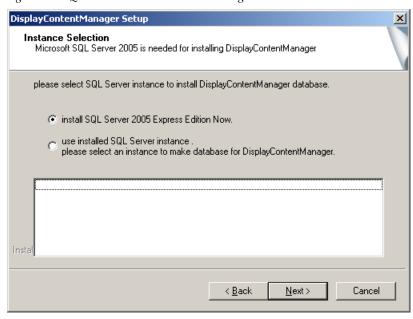
Figure 74. SQL Server Instance Selection Dialog



Usually, there will already be an SQL Server instance for MediaEdge installed as illustrated in Figure 74. If this is the case, click the Next button and proceed to Step 8 when the Select Materials Path dialog appears.

If no SQL Server Instance is installed, select the Instal SQL Server 2005 Express Edition now option as shown in Figure 75 and proceed to Step 5.

Figure 75. SQL Server Instance Selection Dialog



5. Click **Next** to install SQL Server 2005 Express Edition.

The SQL Server Installation dialog shown in Figure 76 appears.

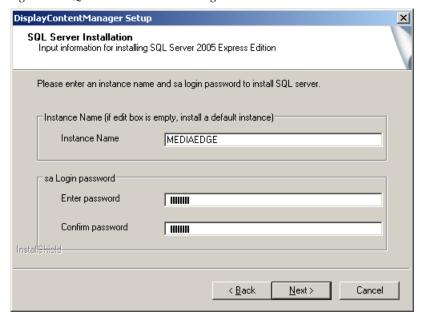


Figure 76. SQL Server Installation Dialog

- **6.** Enter the desired SQL Server Instance Name and login password as illustrated in Figure 76.
- Note Generally, in a Windows authenticated network, the sa login password is not needed; however, in small networks without a domain controller and Windows authentication to all networked computers, the sa login password may be needed to access the DCM database.
- **7.** Click **Next** to begin the SQL Server installation and instance creation process.

The SQL Server Installing Prerequisites dialog shown in Figure 77 and the SQL Server Setup Progress dialog shown in Figure 78 appear during the SQL Server installation process.

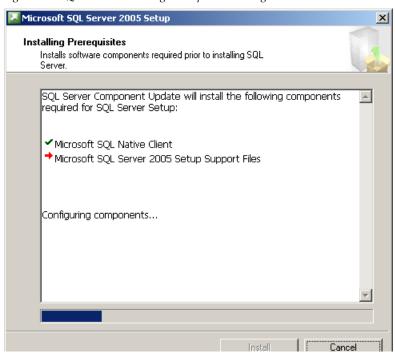
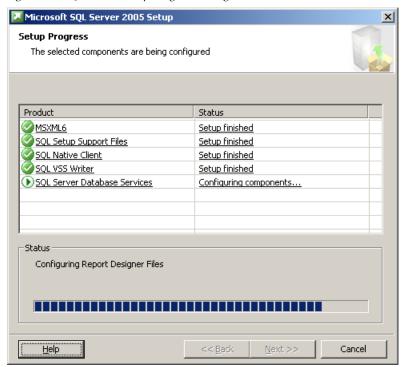


Figure 77. SQL Server Installing Prerequisites Dialog

Figure 78. SQL Server Setup Progress Dialog



When the SQL Server 2005 Express Edition setup is complete, the Select Materials Path dialog illustrated in Figure 79 appears.

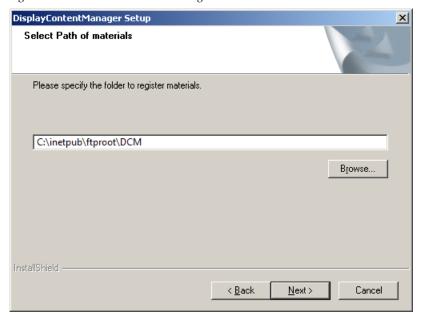


Figure 79. Select Materials Path Dialog

8. Enter the desired folder path or click on the **Browse** button to browse for the desired folder in which MediaEdge material (assets, content) are stored on the server. These are the assets to be managed by the DCM.

Note In order to save disk space, it is recommended that the material (asset) path be the same as the folder specified as the FTP content directory. See *Configure the FTP Server on page 44* for more information.

9. Click the Next button.

The Select Video Standard dialog shown in Figure 80 appears.

DisplayContentManager Setup

Select video standard

Please select video standard of installing contents.

InstallShield

Figure 80. Select Video Standard Dialog

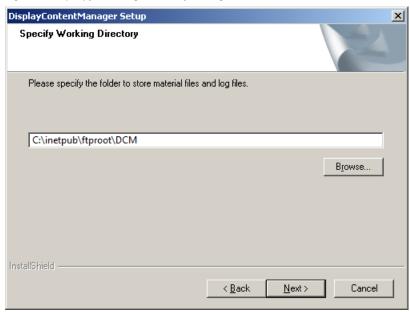
Select the desired video standard and click the Next button.
 The Specify Working Directory dialog illustrated in Figure 81 appears.

k <u>B</u>ack

Next>

Cancel

Figure 81. Specify Working Directory Dialog



11. Enter the desired directory path for storing material and log files. The Ready to Install dialog shown in Figure 82 appears.

Figure 82. Ready to Install the Program Dialog

12. Click the **Install** button to install the selected features.

Various status messages will appear during the installation including the dialog illustrated in Figure 83 appears.

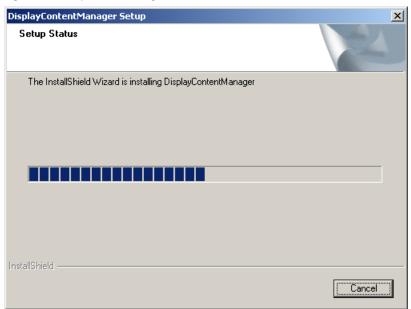


Figure 83. Setup Status Dialog

When installation is complete, the dialog in Figure 84 appears.

InstallShield Wizard Complete

The InstallShield Wizard has successfully installed
DisplayContentManager. Click Finish to exit the wizard.

Figure 84. Installation Complete Dialog

13. Click the **Finish** button to finish the installation.

Getting Started with the DCM

After installation of the Display Content Manager, the DCMConsole application may be used to manage, distribute and schedule playout of MediaEdge content. This section contains information concerning the basic operation and configuration of the DCMConsole application.

Note

Other aspects of a MediaEdge system such as the MediaEdge server software, set-top-box or software playout client, content recording devices, etc. are not covered in this Installation and User Guide. Please refer to the documentation for those devices and applications for more information.

Start the DCM Console

To run the DCMConsole application, locate the DCMConsole icon on the desktop (see Figure 85) and double-click the icon to launch the application.

The DCM installation procedures documented in *Section 2-DCM Software Installation* create a desktop shortcut for the DCMConsole application.

Figure 85. DCMConsole Application Icon



If the shortcut icon does not appear on the desktop, do one of the following:

- Select Start>All Programs>Canopus>DisplayContentManager>DCM-Console.
- Select Start>Run and enter the path for the DCMConsole application executable (MManager.exe) into the Open: field. You may also click the Browse button and browse to the executable location.

Note If the application was installed in the default folder, the executable path is C:\Program Files\Canopus\DisplayContentManager\MManager.exe

Create a desktop shortcut for the DCMConsole application using standard Windows methods.

After starting the DCMConsole, the application screen shown in Figure 86 appears.

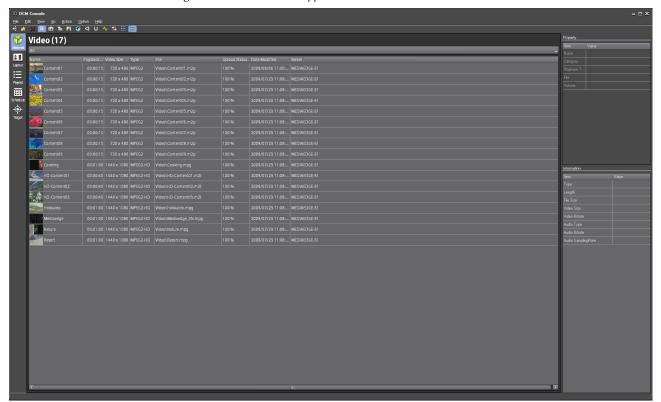
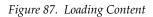
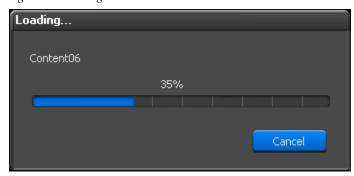


Figure 86. DCMConsole Application

Note

The default navigation bar selection is Material with the Video material type selected. When the DCMConsole is launched, or when the material type is changed, registered material is loaded into the application. For a few seconds, the Loading dialog illustrated in Figure 87 will appear as the registered content is loaded.





DCM Console Overview

The DCM Console consists of five (5) primary screens and their associated functions. Access to these screens and functions is through the Navigation Bar shown in Figure 88.

Figure 88. DCM Console Navigation Bar



Selecting one of these five buttons causes the associated function screens, tool bar and menu bar to be displayed.

Material Button

Opens the Material screen in which content to be managed by the DCM is registered and transferred to the FTP Server. See *Section 4-Material Screen* for detailed information regarding the Material screen.

Note

In this user guide, the terms material, content and assets are synonymous and refer to video, still image, ticker/text, Flash, QuickTime, HTML, audio, URI, command and volume files managed by the DCM.

Layout Button

Opens the Layout screen in which multi-region digital signage display layouts are created and managed. These layouts may incorporate video, stills, ticker text, Flash animations, QuickTime, HTML, audio, URIs and control commands. See *Section 5-Layout Screen* for detailed information on the Layout screen.

Playlist Button

Opens the Playlist screen in which content playlists are created and managed. See *Section 6-Playlist Screen* for detailed information concerning the Playlist screen.

Schedule Button

Opens the Schedule screen in which playout channels and schedules are created and managed. See *Section 7-Schedule Screen* for detailed information regarding the Schedule screen.

Target Button

Opens the Target screen in which servers and clients are registered, client groups are created and managed and schedule update settings are specified. See *Section 8-Target Screen* for detailed information concerning the Target screen.

Alternative Function Screen Access Methods

The following alternative methods of selecting the desired function screen are also available:

Material Screen

Select Go>Material from the Menu bar or press the [CTRL]+[1] keys on the keyboard.

Layout Screen

Select Go>Layout from the Menu bar or press the [CTRL]+[2] keys on the keyboard.

Playlist Screen

Select Go>Playlist from the Menu bar or press the [CTRL]+[3] keys on the keyboard.

Playlist Screen

Select Go>Schedule from the Menu bar or press the [CTRL]+[4] keys on the keyboard.

Target Screen

Select Go>Target from the Menu bar or press the [CTRL]+[5] keys on the keyboard.

Tool Bar and Status Bar

By default, the Tool Bar and Status Bar (at the bottom of the display screen) are displayed in each of the five functional screens. If you want to enable/disable either of these, select View from the Menu bar and click on the item

you wish to enable or disable. If a check mark is present by the item, it is enabled; if there is no check mark, it is disabled (see Figure 89).

Note The Navigation bar, Go menu options and Tool Bar and Status bar toggles are available from all five of the main function screens.

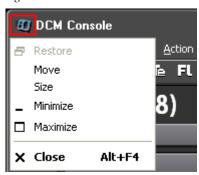
Figure 89. DCM Console View Menu



DCM Console Icon Menu

Clicking on the DCM Console Icon (highlighted in red) in the upper left corner of the application window displays the menu illustrated in Figure 90.

Figure 90. DCM Console Icon Menu



This menu is used to manage the DCM Console application window size and position on the computer monitor.

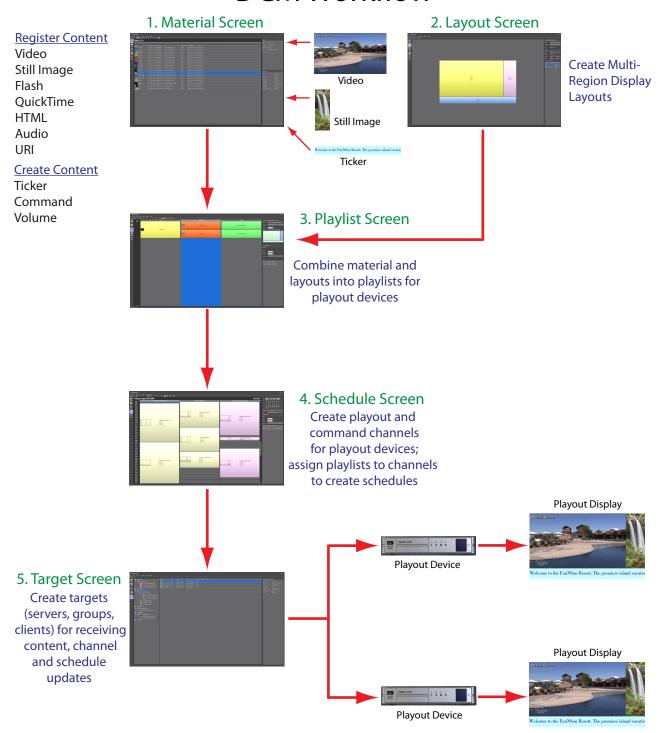
DCM Workflow

As illustrated in Figure 91, the five primary function screens are interdependent. Material must be registered and display layouts defined before playlists can be created. Playlists must exist before playout and command channels can have schedules created for them. Channels and schedules must be defined before targets can be fully configured.

When initially configuring MediaEdge workflows in the DCM, the screens should be accessed in the order in which they appear in the Navigation bar; i.e. Material, Layout, Playlist, Schedule and Target. This is the order in which these screens are documented in this User Guide.

Figure 91. DCM Workflow Diagram

DCM Workflow



Before proceeding to *Section 4-Material Screen*, see the information below concerning configuration of the DCM and verify that it is configured properly and according to your preferences.

DCM Console Configuration

The DCM Console was configured during the installation process and, usually, this configuration does not need to be changed. However, if the network is reconfigured, server names and IP addresses are changed, or, FTP servers are added or removed from the system, the DCM configuration may need to be updated to reflect these changes in order for it to continue functioning properly.

Note Configuring FTP Servers, Environment Settings and Default Settings can be done from any of the five main functional screens.

Configure FTP Servers

To add, edit or delete an FTP Server in the DCM configuration, follow these steps:

1. Select Option>FTP Server... from the Menu bar.

The FTP Server list dialog illustrated in Figure 92 appears.

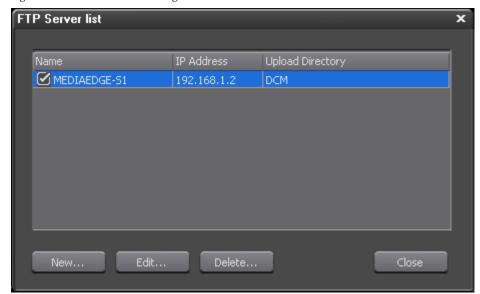
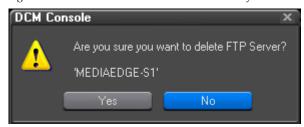


Figure 92. FTP Server List Dialog

2. To delete an FTP Server, select the desired server name and click the **Delete** button. To Add or Edit an FTP Server, proceed to Step 4.

The DCM Console FTP server delete confirmation dialog shown in appears.

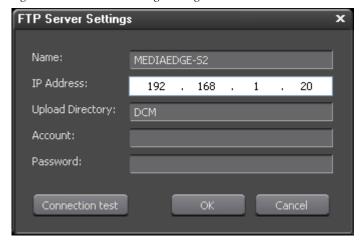
Figure 93. DCM Console FTP Server Delete Confirmation Dialog



- **3.** Click the **Yes** button to confirm deletion of the selected FTP Server and return to the FTP Server list dialog.
- **4.** To add a new FTP Server, click the **New** button; to edit an existing FTP Server definition, select the desired FTP Server and click the **Edit** button.

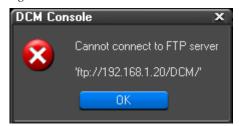
The FTP Server Settings dialog shown in Figure 94 appears.

Figure 94. FTP Server Settings Dialog



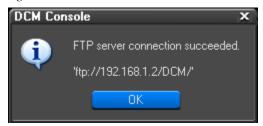
- **5**. Enter or edit the FTP server details and click the **Connection test** button to verify the connection to the FTP server.
- **6.** If the DCM Console Cannot connect to FTP server dialog illustrated in Figure 95 appears, click the **OK** button, verify the FTP server details and make any necessary changes in the FTP Server Settings dialog.

Figure 95. FTP Server Connection Failed



7. If the DCM Console FTP server connection succeeded, the dialog shown in Figure 96 appears, click the OK button to close the dialog and return to the FTP Server Settings dialog.

Figure 96. FTP Server Connection Succeeded



- **8.** Click the **OK** button to close the FTP Server Settings dialog.
- **9.** Return to Step 2 and perform additional FTP Server configuration procedures as needed. Proceed to Step 10 when finished with FTP Server configuration.
- **10**. Click the **Close** button to close the FTP Server list dialog.

Configure Environment Settings

The DCM Console environment settings determine the local location to which content is copied for uploading to the DCM database via FTP and how the console application connects to the MediaEdge server and SQL database.

The initial settings are determined during installation of the DCM Console application. In most cases, these settings will not need to be changed unless something in the MediaEdge or DCM environment has changed since the installation.

The edit the environment settings, do the following:

1. Select Option>Configuration... from the Menu bar.

The Environment Settings dialog illustrated in Figure 97 appears.

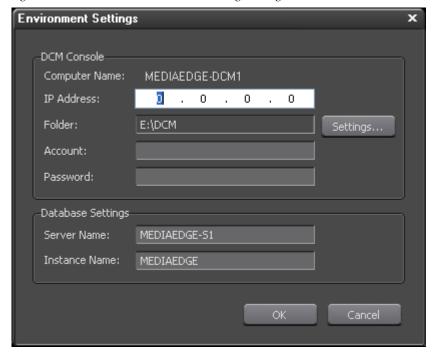


Figure 97. DCM Console Environment Settings Dialog

- **2.** Edit any of the information as needed.
- The IP address of the local machine is generally not needed unless there are multiple NICs in the machine and you need to specify an IP address other than the one specified during installation.
- To browse for a new material folder on the local machine, click the Settings... button next to the Folder: field.
- The Database Server Name and Instance Name were specified during installation. You may direct the DCM to a different server and/or database instance by changing this information.
- **3.** When finished editing environment settings, click the **OK** button to close the dialog.

Configure Default Settings

Default settings can be configured for Material and Playlists. The Material defaults are applied when new material is added to the DCM. The Playlist defaults are applied when new playlists are created.

To set Material and Playlist defaults, follow these steps:

1. Select Option>Default Settings... from the Menu bar.

The Default Settings dialog shown in Figure 98 appears.

2. If not already selected, select the Material tab.

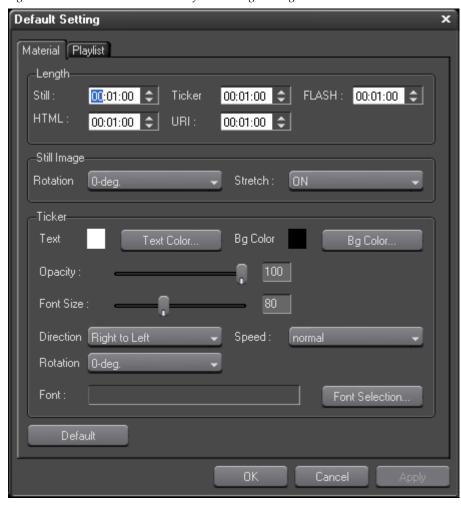


Figure 98. DCM Console Material Default Settings Dialog

Note The **Default** button in the lower left corner of the Material tab may be used to return all Material default values to the original values set by the DCM installation process.

The Material tab defaults are divided into three sections:

3. For each item, select the desired default value as explained below:

Length Defaults

Set defaults for the length of Still, Ticker, Flash, HTML and URI assets.

Note Video, QuickTime and Audio assets have a playback time that is determined by the asset file. The playback time can be adjusted to be less than the original time; however, there is no default length for these assets. Serial Commands and Volume assets do not have length settings.

Length is a numeric value and is adjusted by entering the desired length with the keyboard or clicking the arrows to increment or decrement the selected value. Length is expressed in hours:minutes:seconds (HH:MM:SS).

Still Image Defaults

These defaults apply to Still Image assets only when they are registered in the DCM.

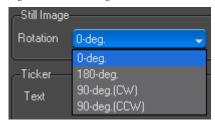
Rotation

A still image may be rotated with respect to its current orientation.

Click the list button $[\nabla]$ on the Rotation drop-down to see the list of choices for that value. Select the desired value from the list of choices.

See Figure 99 for Still Image Rotation choices.

Figure 99. Still Image Rotation Selection



Note 90-deg.(CW) is a clockwise rotation. 90-deg.(CCW) is a counter-clockwise rotation.

Stretch

A still image may be stretched to fill the dimensions of a particular viewing area. When stretched, the image may or may not have an acceptable appearance based on the still image aspect ratio and orientation and the dimensions of the viewing area.

To change the default stretch setting for a still image, click the list button $[\nabla]$ on the stretch drop-down and select ON or OFF (see Figure 100) from the list as desired.

Figure 100. Still Image Stretch Selection



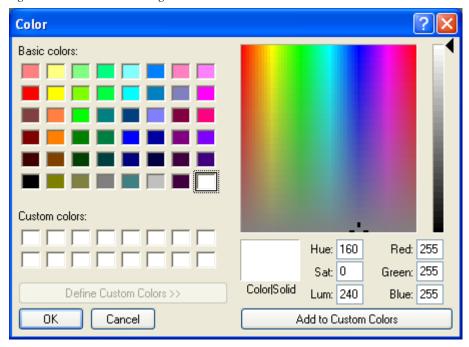
Ticker Defaults

These defaults apply to Ticker assets when they are created in the DCM.

Text Color and Background (BG) Color

The default ticker text color and background color are selected by clicking on the **Text Color...** and **BG Color...** buttons and using the Color dialog illustrated in Figure 101.

Figure 101. Ticker Color Dialog



Select the desired color through any of the methods available in the dialog and click the **OK** button to close the dialog.

Opacity

Ticker background color opacity is adjusted with a slider as illustrated in Figure 102. The slider scale is from 0% to 100% opacity. For a completely transparent background, set opacity to 0%. For a completely opaque background (nothing shows through), set the opacity to 100%.

Figure 102. Ticker Opacity Slider



Move the slider to the desired opacity setting.

Note The opacity may also be set by entering the desired numeric opacity value directly in the numeric entry box.

Font Size

The default font size is adjusted with a slider as shown in Figure 103. The slider scale is from 10 point to 200 point font size.

Figure 103. Ticker Font Size Selection



Move the slider to the desired font size setting.

Note The font size may also be set by entering the desired numeric font size value directly in the numeric entry box.

Direction

The Direction setting determines the direction in which Ticker text will scroll. To set a direction default, click the list button $[\nabla]$ on the Direction drop-down and select the desired value from the list of choices.

See Figure 104 for Ticker Direction choices.

Figure 104. Ticker Direction Selection



Speed

The Speed setting determines the speed at which Ticker text will scroll. To set a speed default, click the list button $[\nabla]$ on the Speed drop-down and select the desired value from the list of choices.

See Figure 105 for Ticker Speed choices.

Figure 105. Ticker Speed Selection

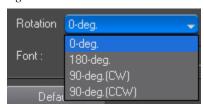


Rotation

The Rotation changes the orientation of the Ticker text with respect to its current orientation. To set a rotation default, click the list button $[\nabla]$ on the Rotation drop-down and select the desired value from the list of choices.

See Figure 106 for Ticker Rotation choices.

Figure 106. Ticker Rotation Selection

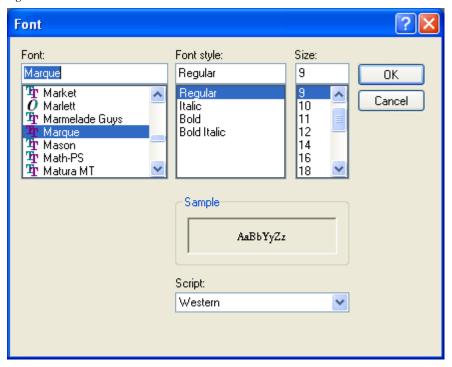


Note 90-deg.(CW) is a clockwise rotation. 90-deg.(CCW) is a counter-clockwise rotation.

Font

The default ticker text font is selected by clicking on the **Font Selection**... button and using the Font dialog illustrated in Figure 107.

Figure 107. Ticker Font Selection



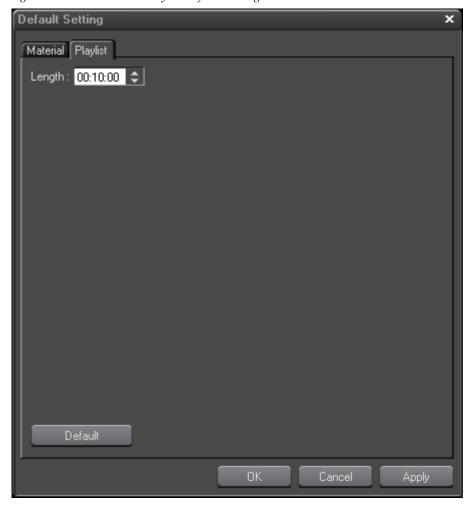
Select the desired font from the font list and select the any desired font style settings. Click the **OK** button to close the dialog.

Note The font size setting in this dialog is ignored. The default Ticker font size is set using the Font Size slider.

- **4.** Click the **Apply** button to apply the Material defaults.
- **5.** After setting the Material defaults, click on the Playlist tab in the Default Settings dialog.

The dialog illustrated in Figure 108 appears.

Figure 108. DCM Console Playlist Default Settings



Note The **Default** button in the lower left corner of the Playlist tab will return the Playlist Length to the original default value set during the DCM Installation process.

6. Set the desired Playlist Length default.

Length is a numeric value and is adjusted by entering the desired length with the keyboard or clicking the arrows to increment or decrement the selected value. Length is expressed in hours:minutes:seconds (HH:MM:SS).

7. Click the **OK** button to apply all current default settings and close the Default Settings dialog.

Close/Exit the DCM Console

To close the DCM Console application, do one of the following:

- Select File>Exit from the Menu bar.
- Click the **Close** icon in the upper right corner of the DCM application window.
- Press the [ALT]+[F4] keys on the keyboard.

Material Screen

The Material screen is where content to be managed by the DCM is registered and transferred to the FTP Server.

When the **Material** button is selected from the Navigation bar, or, one of the methods explained in *Alternative Function Screen Access Methods on page 92* is used, the Material Screen appears with its associated display areas and function bars as illustrated in Figure 109. These elements are used in the management of assets recorded in the DCM database.

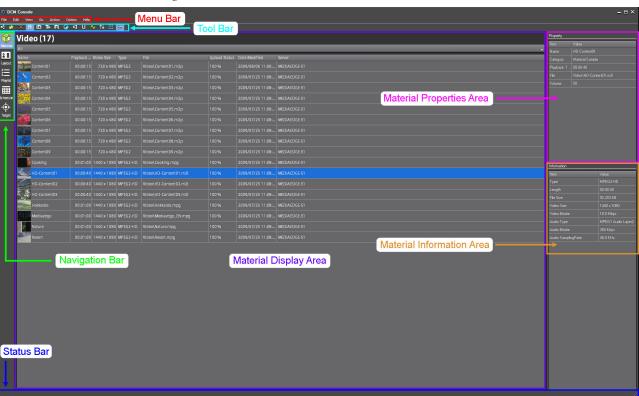


Figure 109. Material Screen

Note

Figure 109 depicts the Material Display Area with a material type (Video) open. The Material Display Area will be blank when the Material Screen is first accessed.

Material Details

Material in the DCM database is organized by material type. The supported material types include the following:

Video

MPEG-2 transport stream, MPEG-2 program stream and MPEG-4 (H.264) (.MPG, .MPEG, M2P, .M2T, .MTS, M2TS). See *Add a Video Asset on page* 124.

Still Images

JPEG, BMP, GIF (transparent GIF supported), PNG (transparent PNG supported). See *Add a Still Image Asset on page 127*.

Text/Ticker

TXT, RSS (may be registered as Uniform Resource Identifier [URI] material). See *Create a New Ticker Asset on page 132*.

Flash

SWF. See Add a Flash Asset on page 138.

Note Animated Flash files up to Flash version 7 are supported.

QuickTime

MOV, QT, MPV, 3GP, 3GPP, 3G2. Supported by MediaEdge-SWT4 client only. See *Add a QuickTime Asset on page 140*.

HTML

HTML, HTM. See Add an HTML Asset on page 143.

OibuA

WAV (PCM: 8/16/24 bit, 1/2/5.1 ch.), MP3. See *Add an Audio Asset on page* 147.

Uniform Resource Identifier

Any URI such as a web URL, UNC path, RSS feed, etc. See *Create a URI Asset on page 150*.

Serial Commands

ASCII, can be specified as HEX (only supports sending). See *Create a Serial Command on page 154*.

Volume

Volume settings managed by the DCM. See *Create a Volume Asset on page 159*.

Installing the DCM loads sample files of the Video, Still Image, Text/Ticker, Flash, QuickTime, HTML, Audio and Volume content types into the DCM database. This content may be used while learning how to work with the DCM Console.

Material Type Display

When the DCM Console is launched for the first time, the Material screen appears and content of the Video type is displayed. Subsequent launches of the DCM Console may not display the video type if the material type was changed prior to exiting the DCM Console. The last material type to be displayed will be the material type displayed when the DCM Console is next started. For information on selecting the material type to display see *Change Material Type Display on page 111*.

The number in parentheses next to the material type name indicates the number of assets of that type currently registered in the DCM.

To see the details for a particular asset, select that asset from the material display screen by clicking on the desired asset as shown in Figure 110.

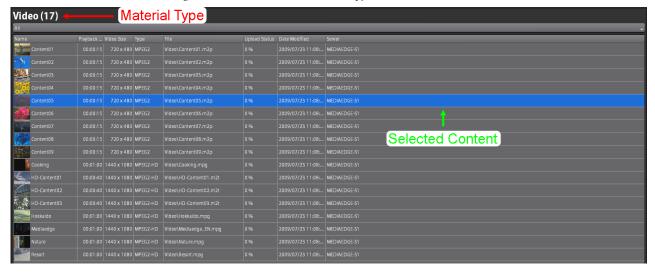


Figure 110. Asset Selected in Video Type List

The selected asset is highlighted in blue.

The file properties and information for the selected asset appear in the Material Properties Window and Material Information Window as illustrated in Figure 111.

Note The information displayed in the Properties Window and Information Window varies based on the selected material type.

Information

Length

File Size

Video Size

<u>Vid</u>eo Bitrate

Audio Bitrate

Audio SamplingRate

MPEG2

00:00:15

11,774 KB

720 x 480

MPEG1 Audio Layer2

Property

Item Value
Name Content05
Category Material Sample
Playback T... 00:00:15
File Video\Content05.m2p

Volume 50

Figure 111. Selected Asset Properties and Information

Material Properties Window (Video Material Type)

The Material Properties Window shows asset properties such as;

- Short file name
- Material category
- Playback time (asset length)
- Material type and file name
- Volume setting

Material Information Window (Video Material Type)

The Material Information Window may contain the following information:

- File format
- Asset length
- File size on disk
- File size in pixels (horizontal x vertical)
- Video bitrate

- Audio Type
- Audio bitrate
- Audio sample rate

Adjust Column Widths

All column widths in the Material Display Area may be adjusted by dragging the column separator to the left or right until the desired column width is displayed.

To adjust the column width, place the cursor on the separator between column headers as illustrated in Figure 112 and drag to adjust the width as desired.

Figure 112. Adjust Material Display Column Width

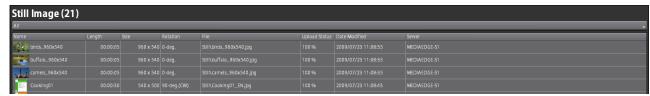


Note

Column widths are adjusted independently in the display area for each material type. Adjusting the columns in the Video Material Display Area does not adjust the columns to those same widths for the display areas of other material types.

Figure 113 shows a Still Image Material Display Area in which the columns widths have been adjusted to accommodate the longest entry in each column.

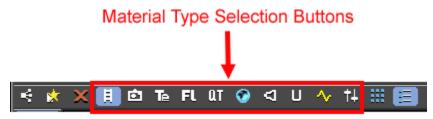
Figure 113. Column Widths Adjusted for Still Image Display Window



Change Material Type Display

The Material Screen Tool bar provides a convenient way to change the Material Type that is displayed in the Material Display Area. The Tool bar material type selection buttons are shown in Figure 114.

Figure 114. Material Type Selection Buttons



The currently-selected material type is highlighted in light blue. In the example above, the Video material type is selected.

To change the material type display to a different type, click the button icon that corresponds to the desired material type as illustrated in Table 1. Alternatively, you may use the listed Menu bar method.

Table 1. Material Type Display Icons and Menu Alternatives

lcon	Display Type	Menu Bar Method
Ħ	Video	View>Material type>Video
Ċ	Still Image	View>Material type>Image
Te	Ticker	View>Material type>Ticker
FL	Flash	View>Material type>Flash
at	QuickTime	View>Material tupe>QuickTime
•	HTML	View>Material type>HTML
٥	Audio	View>Material type>Audio
П	URI	View>Material type>URI
^	Serial Command	View>Material type>Command
†↓	Volume	View>Material type>Volume

When a material type button is clicked or a material type menu item is selected, the Material Display Area displays all managed content of the selected type.

Change Display Style

The Material Screen Tool bar provides a convenient way to change the display style of the Material Display Area. The Tool bar display style selection buttons are shown in Figure 115.

Figure 115. Display Style Selection Buttons



The currently-selected display style is highlighted in light blue. In the example above, the Details display style is selected.

To change the display style in the Material Display Area, click the button icon that corresponds to the desired display style as illustrated in Table 2. Alternatively, you may use the listed Menu bar method.

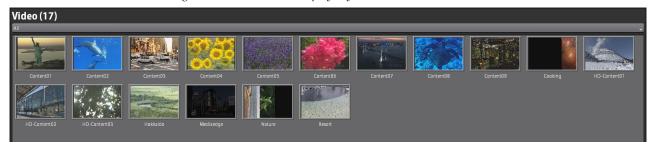
Table 2. Display Style Icons and Menu Alternatives

lcon	Display Style	Menu Bar Method
	Thumbnails	View>Thumbnails
E	Details	View>Details

The Details display style is illustrated in Figure 110 on page 109.

The Thumbnails style is shown in Figure 116.

Figure 116. Thumbnails Display Style



Manage Content Categories

Usually, when material of a certain type is displayed, all assets belonging to that type are displayed in the Material Display Area. However, it is possible to limit the display of material to only those assets that correspond to a specified category.

The default content categories are:

- All (displays all content regardless of category)
- None (a category to which content not belonging to any other category may be assigned.)
- Material Sample (displays all sample content included with the DCM installation, unless it is assigned to a different category.)

Note Unless sample content is assigned to a new category, selecting "All" or "Material Sample" will result in the display of all included content.

Select a Display Category

To display only the content that has been assigned to a specific category, click the list button $[\nabla]$ on the category selection drop-down (see Figure 117) at the top of Material Display Area Material Display Area and select the desired category from the list.

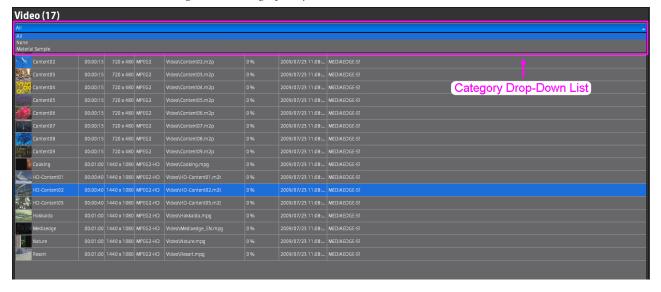


Figure 117. Category Drop-Down List

After selecting the desired category, only assets that have been assigned to that category will be displayed.

Create a New Material Category

New material categories can be created to which content managed by the DCM may be assigned.

Note Categories are not material type specific. All categories are available regardless of the displayed material type. If a category is created while viewing the Video material type, that category is also available for the assignment and display of all other material types.

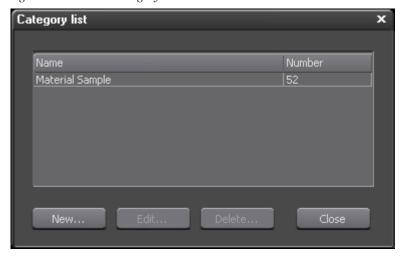
Follow these steps to create a new material category:

- **1.** Do one of the following:
- Click the Category button on the Tool bar.
- Select File>Category... from the Menu bar.

Either action opens the Category List dialog box (see Figure 118) from which you can create, edit and delete content categories.

Note The default categories "All" and "None" cannot be edited or deleted and, therefore, do not appear in the Category List dialog.

Figure 118. Material Category List

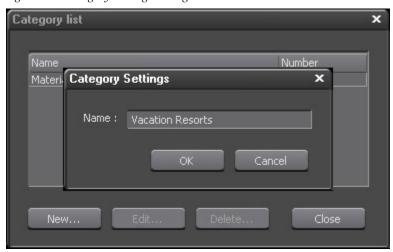


Note The value in the Number column indicates how many assets (across all material types) are currently assigned to the associated category.

2. Click the **New** button.

The Category Settings dialog shown in Figure 119 appears.

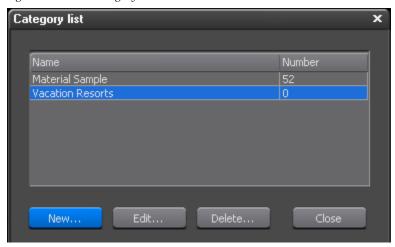
Figure 119. Category Settings Dialog



3. Enter the desired category name and click the **OK** button.

The Category List dialog reappears with the new category added to the category list (see Figure 120).

Figure 120. New Category Added



4. If desired, repeat Step 2 and Step 3 to add more categories.

Note See the next section for instructions on editing or deleting categories.

5. Click the **Close** button to exit the Category List dialog.

Edit or Delete Categories

To edit or delete a category, follow these steps:

- **1.** Do one of the following:
- Click the **Category** button on the Tool bar.
- Select File>Category... from the Menu bar.

Either action opens the Category List dialog box (see Figure 121) from which you can create, edit and delete content categories.

Note The default categories "All" and "None" cannot be edited or deleted and, therefore, do not appear in the Category List dialog.

Figure 121. Material Category List

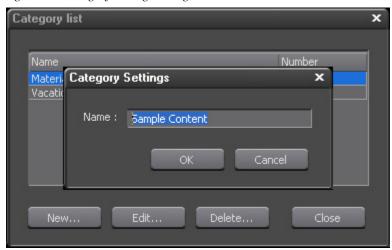


- **2.** Select the category you wish the edit or delete (the selected category will be highlighted in blue).
- 3. Click the Edit or Delete button as desired.

Note A category cannot be deleted to which assets are currently assigned. In order to delete a category, all assets assigned to that category must be reassigned to another category.

If **Edit** was selected, the Category dialog shown in Figure 122 appears.

Figure 122. Category Settings Dialog



4. Edit the category name as desired and click the **OK** button.

The category name is changed.

Note Categories to which material has been assigned may be edited. The new category name will automatically appear in the properties window for any material assigned to that category.

If **Delete** was selected, the error message illustrated in Figure 123 appears if attempting to delete a category to which material is currently assigned.

Figure 123. Category Delete Error



If the category to be deleted is empty, the confirmation prompt shown in Figure 124 appears.

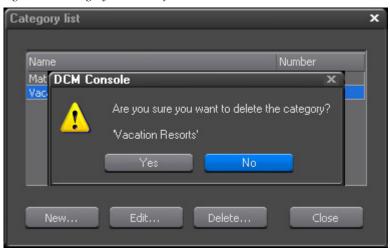


Figure 124. Category Delete Confirmation

- **5**. Click **Yes** to confirm deletion of the category.
- **6.** Click the **Close** button to exit the Category List dialog.

Assign Content to a Category

Content managed by the DCM may be added to categories for display and management purposes.

To add material to a category, do the following:

1. In the Material Display Area, select the asset to be assigned to a category.

The Properties Window displays the attributes associated with the selected asset, including the assigned category, as illustrated in Figure 125.

Property

Item Value
Name Content05
Category Material Sample
Playback T... 00:00:15
File Video\Content05.m2p

Volume 50

Figure 125. Properties Window

2. Click in the Category field.

The Category field is highlighted in blue and a list button appears on the current category name.

3. Click the list button $[\nabla]$ on the category name to display the category drop-down list as shown in Figure 126.

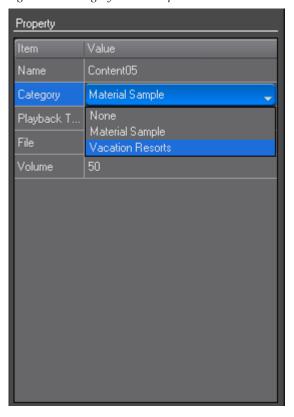


Figure 126. Category List in Properties Window

4. Highlight the desired category from the drop-down list and click on the category name.

The asset is assigned to the selected category as illustrated in Figure 127.

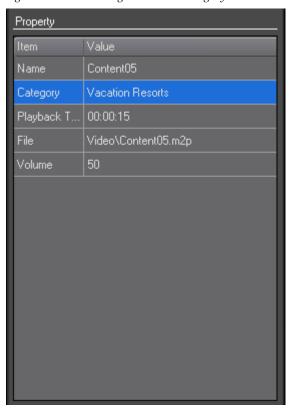
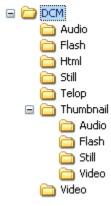


Figure 127. Asset Assigned to New Category

Register Material

Content managed by the DCM is called "registered material." Registered material is stored in a folder structure managed by the DCM and the appropriate records are added to the DCM database. The DCM folder structure on the Control PC is illustrated in Figure 128.

Figure 128. DCM Folder Structure



If an existing file (video, still image, audio, etc.) stored in a folder outside this structure is registered in the DCM, it is copied to the appropriate folder in the DCM folder structure and records are created in the DCM database. If the added file is already stored in the DCM folder structure, the original file is simply registered in the DCM database.

Content of the same material type as the content displayed in the Material Display Area may be added to the DCM. Available material types are video, still image, ticker, Flash, HTML, audio, URI, command and volume.

Note For Video, Still Image, Flash, QuickTime, HTML and Audio types, this action does not create a new file. It is used to add an existing file of the displayed type to the DCM database for management and distribution by the DCM. For example, if Video is the currently displayed material type, the Add an Asset procedure allows you to specify the location of an existing video file of a supported format which you wish to add to the DCM for management purposes.

Registered Material is uploaded to one or more FTP servers for distribution to the playout devices in the MediaEdge system. See *Upload Registered Material to FTP Server on page 165* for more information concerning this operation.

Add Assets By Drag and Drop

Video, Still Image, Flash, QuickTime, HTML and Audio assets may be dragged from a Windows Explorer view to the Material Display Area. Only files that are of the same type as those currently displayed in the Material Display Area may be added. For example, if video content is currently displayed in the Material Display Area, video files may be registered in the DCM via drag and drop. To register files in this manner, do the following:

- 1. Open Windows Explorer
- **2.** Navigate to the directory containing the file(s) you wish to register in the DCM.
- **3.** Select and drag the desired file(s) from Windows Explorer and drop them on the Video Material Display Area.

Other methods of adding content to the DCM are explained below for each material type.

Add a Video Asset

After switching the Material Display Area (see *Change Material Type Display on page 111* for more information) to the Video material type, follow these steps to add new video content to the DCM:

- **1.** Do one of the following:
- Click the **New** button on the Tool bar.
- Select File>New from the Menu bar.
- Press the [CTRL]+[N] keys on the keyboard.

The Select Video File dialog shown in Figure 129 appears.

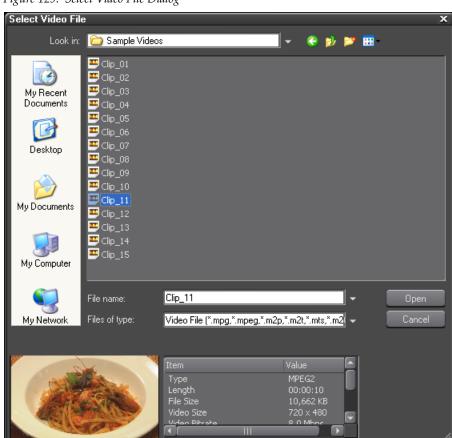


Figure 129. Select Video File Dialog

Note When a video asset is selected, a thumbnail and file attributes are displayed.

- **2.** Browse to the folder containing the video asset you wish to add and select that asset.
- 3. Click the Open button.

Note The asset may also be added to the DCM by double clicking the desired asset.

As illustrated in Figure 130, the selected asset is added and is displayed in the Material Display Area.

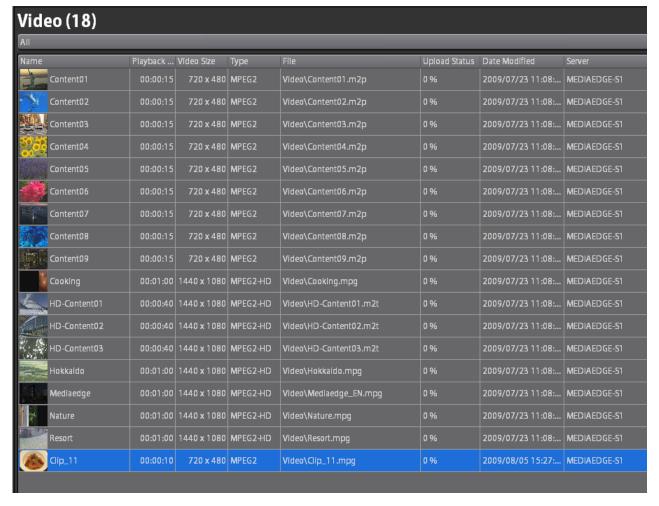


Figure 130. Video Asset Added to DCM

The Properties and Information Areas display the attributes of the newly added video file.

Edit Video Properties

All of the properties of a video asset may be set to a value other than the original value.

To change the values associated with a video asset, click on the value(s) you wish to change and enter the desired value via the methods explained below:

Name

Click in the name field and enter the desired video file name (see Figure 131).

Figure 131. Video Name Entry

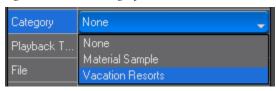


Category

Click in the Category field and then click the list button $[\nabla]$ that appears in the field to see the list of choices for that value. Select the desired value from the list of choices.

See Figure 132 for an example. The choices that appear in this list are dependent upon the Category names that have been created. See *Create a New Material Category on page 115* for more information.

Figure 132. Video Category Selection



Playback Time

Playback time is a numeric value and is adjusted by clicking the Playback Time field and entering the desired playback time by using the keyboard or the arrows to increment or decrement the selected value. Playback time is expressed in hours:minutes:seconds (HH:MM:SS).

Note

In the case of a video file which has an original playback time based on the length of the video file, the playback time may only be shortened. The specified playback time cannot exceed the original playback time.

See Figure 133 for an example.

Figure 133. Video Playback Time Entry



File

If desired, the file associated with a DCM database record may be changed by browsing for a different file.

Note Only files not already registered in the DCM may be associated with an existing DCM entry.

Volume

Volume with a slider as illustrated in Figure 134. The slider scale is from 0% to 50%. Each tick mark represents a 5% change in volume.

Figure 134. Video Volume Slider



Move the slider to the desired volume setting.

Add a Still Image Asset

After switching the Material Display Area (see *Change Material Type Display on page 111* for more information) to the Still Image material type, follow these steps to add new still image content to the DCM:

- **1.** Do one of the following:
- Click the **New** button on the Tool bar.
- Select File>New from the Menu bar.
- Press the [CTRL]+[N] keys on the keyboard.

The Select Still Image File dialog shown in Figure 135 appears.

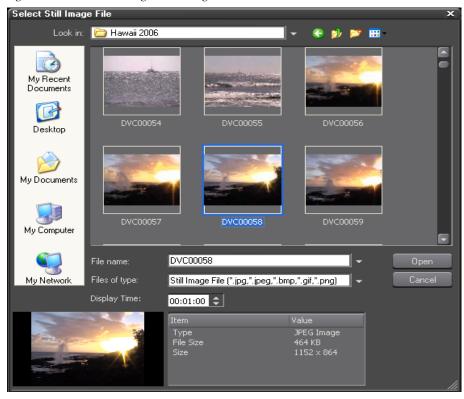


Figure 135. Select Still Image File Dialog

Note When a still image asset is selected, a thumbnail and file attributes are displayed.

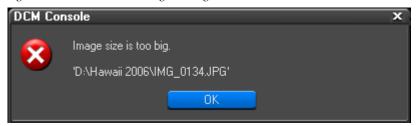
- **2.** Browse to the folder containing the still image asset you wish to add and select that asset.
- **3.** Click the **Open** button.

Note The asset may also be added to the DCM by double clicking the desired asset.

Note

Due to limitations in hardware playout devices (HDMA-4000/HDMA-4100/STB3 DS/STB4/STB4H), still images are limited to a maximum resolution of 2000x2000 pixels in order to avoid potential playout issues. If either dimension exceeds 2000 pixels (e.g. 2048x1536) the error message shown in Figure 136 appears and the image cannot be registered in the DCM. If you wish to add an image that is too large, it must be resized to meet the resolution limitations.

Figure 136. DCM Console Image Too Big Error



If the selected image is within the resolution limitations, the asset is added to the DCM, as illustrated in Figure 137, and is displayed in the Material Display Area.

Figure 137. Still Image File Added to DCM



The Properties and Information Areas display the attributes of the newly added still image file.

Edit Still Image Properties

All of the properties of a still image asset may be set to a value other than the original value.

To change the values associated with a still image asset, click on the value(s) you wish to change and enter the desired value via the methods explained below:

Name

Click in the name field and enter the desired still image asset name (see Figure 138).

Figure 138. Still Image Name Entry

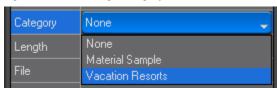


Category

Click in the Category field and then click the list button $[\nabla]$ that appears in the field to see the list of choices for that value. Select the desired value from the list of choices.

See Figure 139 for an example. The choices that appear in this list are dependent upon the Category names that have been created. See *Create a New Material Category on page 115* for more information.

Figure 139. Still Image Category Selection



Length

Length is a numeric value and is adjusted by clicking the Length field and entering the desired length by using the keyboard or the arrows to increment or decrement the selected value. Length is expressed in hours:minutes:seconds (HH:MM:SS).

See Figure 140 for an example.

Figure 140. Still Image Length Entry



File

If desired, the file associated with a DCM database record may be changed by browsing for a different file.

Note Only files not already registered in the DCM may be associated with an existing DCM entry.

Rotation

A still image may be rotated with respect to its current orientation.

Click in the Rotation field and then click the list button $[\nabla]$ that appears in the field to see the list of choices for that value. Select the desired value from the list of choices.

See Figure 141 for Still Image Rotation choices.

Figure 141. Still Image Rotation Selection



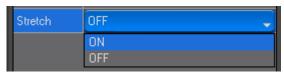
Note 90-deg.(CW) is a clockwise rotation. 90-deg.(CCW) is a counter-clockwise rotation.

Stretch

A still image may be stretched to fill the dimensions of a particular viewing area. When stretched, the image may or may not have an acceptable appearance based on the still image aspect ratio and orientation and the dimensions of the viewing area.

To change the stretch setting for a still image, click in the Stretch field and then click the list button $[\nabla]$ that appears to select ON or OFF (see Figure 142) from the list as desired.

Figure 142. Still Image Stretch Selection



To verify the appearance of a stretched image, preview the image by selecting Action>Preview... from the Menu bar.

Create a New Ticker Asset

Content of the same material type as the content displayed in the Material Display Area may be added to the DCM. Available material types are video, still image, ticker, QuickTime, Flash, HTML, audio, URI, command and volume.

Note Ticker, URI, command and volume files are created in the DCM rather than adding existing files as with the other material types.

After switching the Material Display Area (see *Change Material Type Display on page 111* for more information) to the Ticker material type, follow these steps to create a new ticker asset in the DCM:

- **1.** Do one of the following:
- Click the **New** button on the Tool bar.
- Select File>New from the Menu bar.
- Press the [CTRL]+[N] keys on the keyboard.

A new Ticker asset is added to the DCM and is displayed in the Material Display Area as shown in Figure 143.



Figure 143. Ticker Asset Added to the DCM

Default properties are assigned to the ticker asset as illustrated in Figure 144. See *Ticker Defaults on page 101* for more information on setting ticker defaults.

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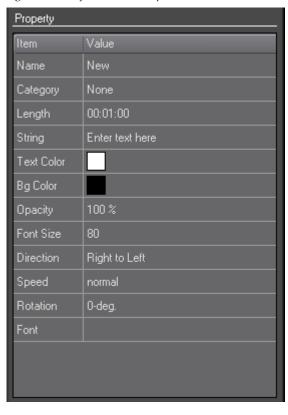


Figure 144. Default Ticker Properties

Edit Ticker Properties

All of the properties of a ticker asset may be set to a value other than the defaults.

To change the values associated with a ticker asset, click on the value(s) you wish to change and enter the desired value via the methods explained below:

Text

For text fields, just click in the field and enter the desired text. The following are text entry fields:

Name

Click in the name field and enter the desired ticker name (see Figure 145).

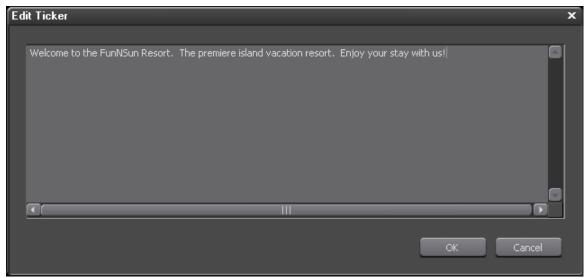
Figure 145. Ticker Name Entry



String

Click in the String field and enter the desired ticker text into the Edit Ticker dialog. Click the **OK** button when finished (see Figure 146).

Figure 146. Ticker String Entry



Drop-Down Lists

For drop-down lists, click in the desired value field and then click the list button $[\nabla]$ that appears in the field to see the list of choices for that value. Select the desired value from the list of choices.

Category

See Figure 147 for an example. The choices that appear in this list are dependent upon the Category names that have been created. See *Create a New Material Category on page 115* for more information.

Figure 147. Ticker Category Selection



Direction

The Direction setting determines the direction in which ticker text will scroll.

See Figure 148 for Ticker Direction choices.

Figure 148. Ticker Direction Selection



Speed

The Speed setting determines the speed at which ticker text will scroll. See Figure 149 for Ticker Speed choices.

Figure 149. Ticker Speed Selection

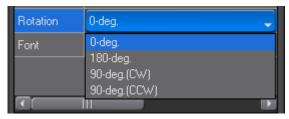


Rotation

The Rotation setting changes the orientation of the Ticker text with respect to its current orientation.

See Figure 150 for Ticker Rotation choices.

Figure 150. Ticker Rotation Selection



Note 90-deg.(CW) is a clockwise rotation. 90-deg.(CCW) is a counter-clockwise rotation.

Sliders, Numeric Entry and Dialogs

The remaining ticker values are adjusted through sliders, numeric entry and dialogs.

Length

Length (running time) is a numeric value and is adjusted by clicking the Length field and entering the desired length by using the keyboard or the arrows to increment or decrement the selected value. Length is expressed in hours:minutes:seconds (HH:MM:SS).

See Figure 151 for an example.

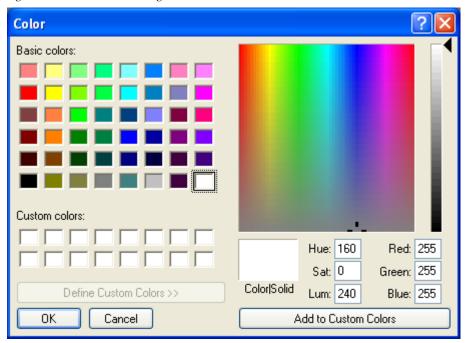
Figure 151. Ticker Length Entry



Text/Background Color

The text color and background color are selected using the Color dialog illustrated in Figure 152.

Figure 152. Ticker Color Dialog



Select the desired color through any of the methods available in the dialog and click the **OK** button to close the dialog.

Opacity

Ticker background color opacity is adjusted with a slider as illustrated in Figure 153. The slider scale is from 0% to 100% opacity. Each tick mark represents a 10% change in opacity. For a completely transparent background, set opacity to 0%.

Figure 153. Ticker Opacity Slider



Move the slider to the desired opacity setting. For a completely opaque background (nothing shows through), set the opacity to 100%.

Font Size

The font size is adjusted with a slider as shown in Figure 154. The slider scale is from 10 point to 200 point font size. Move the slider to the desired font size.

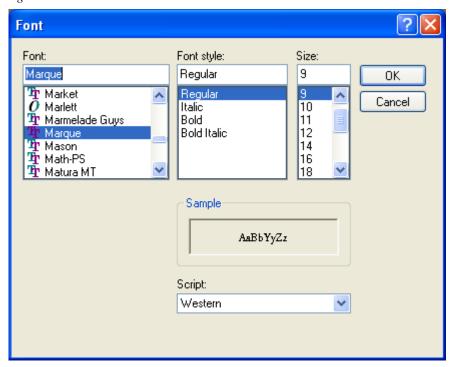
Figure 154. Ticker Font Size Selection



Font

The font for the ticker is selected using the Font dialog illustrated in Figure 155.

Figure 155. Ticker Font Selection



Select the desired font from the font list and select the any desired font style settings. Click the **OK** button to close the dialog.

Note The font size setting in this dialog is ignored. The Ticker font size is set using the Font Size slider.

Add a Flash Asset

After switching the Material Display Area (see *Change Material Type Display on page 111* for more information) to the Flash material type, follow these steps to add new Flash content to the DCM:

- **1.** Do one of the following:
- Click the **New** button on the Tool bar.
- Select File>New from the Menu bar.
- Press the [CTRL]+[N] keys on the keyboard.

The Select Flash File dialog shown in Figure 156 appears.

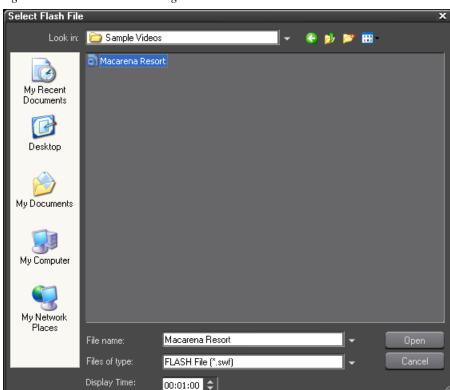


Figure 156. Select Flash File Dialog

Note Flash files up through the current version may be registered and managed by the DCM; however, only Flash files up to version 7 can be played by hardware playout devices. Only .swf formats are supported.

2. Browse to the folder containing the Flash asset you wish to add and select that asset.

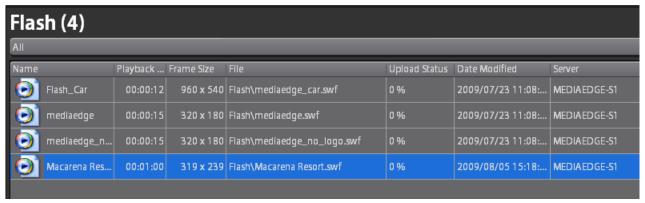
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3. Click the Open button.

Note The asset may also be added to the DCM by double clicking the desired asset.

As illustrated in Figure 157, the selected asset is added and is displayed in the Material Display Area.

Figure 157. Flash Asset Added to DCM



The Properties and Information Areas display the attributes of the newly added Flash file.

Edit Flash Properties

All of the properties of a Flash asset may be set to a value other than the original value.

To change the values associated with a Flash asset, click on the value(s) you wish to change and enter the desired value via the methods explained below:

Name

Click in the name field and enter the desired Flash asset name (see Figure 158).

Figure 158. Flash Name Entry



Category

Click in the Category field and then click the list button $[\nabla]$ that appears in the field to see the list of choices for that value. Select the desired value from the list of choices.

See Figure 159 for an example. The choices that appear in this list are dependent upon the Category names that have been created. See *Create a New Material Category on page 115* for more information.

Figure 159. Flash Category Selection



Length

Length is a numeric value and is adjusted by clicking the Length field and entering the desired length by using the keyboard or the arrows to increment or decrement the selected value. Length is expressed in hours:minutes:seconds (HH:MM:SS).

See Figure 160 for an example.

Figure 160. Flash Length Entry



File

If desired, the file associated with a DCM database record may be changed by browsing for a different file.

Note Only files not already registered in the DCM may be associated with an existing DCM entry.

Add a QuickTime Asset

After switching the Material Display Area (see *Change Material Type Display on page 111* for more information) to the QuickTime material type, follow these steps to add new QuickTime content to the DCM:

- **1.** Do one of the following:
- Click the New button on the Tool bar.
- Select File>New from the Menu bar.
- Press the [CTRL]+[N] keys on the keyboard.

The Select QuickTime File dialog shown in Figure 161 appears.

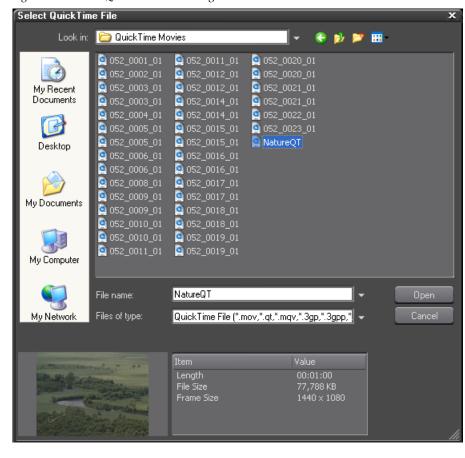


Figure 161. Select QuickTime File Dialog

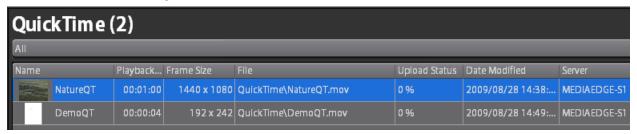
Note When a QuickTime asset is selected, a thumbnail and file attributes are displayed.

- **2.** Browse to the folder containing the QuickTime asset you wish to add and select that asset.
- 3. Click the Open button.

Note The asset may also be added to the DCM by double clicking the desired asset.

As illustrated in Figure 162, the selected asset is added and is displayed in the Material Display Area.

Figure 162. QuickTime Asset Added to DCM



The Properties and Information Areas display the attributes of the newly added QuickTime file.

Edit QuickTime Properties

All of the properties of a QuickTime asset may be set to a value other than the original value.

To change the values associated with a QuickTime asset, click on the value(s) you wish to change and enter the desired value via the methods explained below:

Name

Click in the name field and enter the desired QuickTime asset name (see Figure 163).

Figure 163. QuickTime Asset Name Entry



Category

Click in the Category field and then click the list button $[\nabla]$ that appears in the field to see the list of choices for that value. Select the desired value from the list of choices.

See Figure 164 for an example. The choices that appear in this list are dependent upon the Category names that have been created. See *Create a New Material Category on page 115* for more information.

Figure 164. QuickTime Category Selection



Length

Length is a numeric value and is adjusted by clicking the Length field and entering the desired length by using the keyboard or the arrows to increment or decrement the selected value. Length is expressed in hours:minutes:seconds (HH:MM:SS).

See Figure 165 for an example.

Figure 165. QuickTime Length Entry



File

If desired, the file associated with a DCM database record may be changed by browsing for a different file.

Note Only files not already registered in the DCM may be associated with an existing DCM entry.

Add an HTML Asset

After switching the Material Display Area (see *Change Material Type Display on page 111* for more information) to the HTML material type, follow these steps to add new HTML content to the DCM:

- **1.** Do one of the following:
- Click the **New** button on the Tool bar.
- Select File>New from the Menu bar.
- Press the [CTRL]+[N] keys on the keyboard.

The Select HTML File dialog shown in Figure 166 appears.

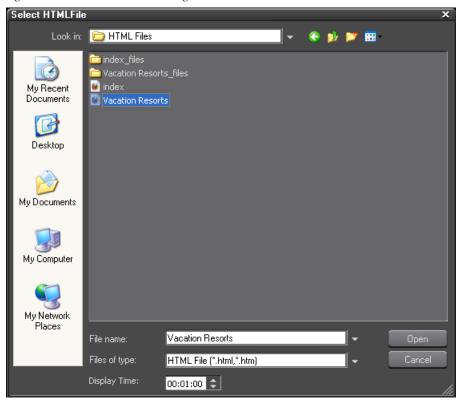


Figure 166. Select HTML File Dialog

Note

A web page usually consists of HTML text files and linked objects (pictures, graphics, etc.) referenced within the HTML text. To register an HTML file in the DCM, add the HTML file(s) first and then add the referenced objects as child materials in the Properties Window. URIs for child materials must be registered as relative paths.

- **2.** Browse to the folder containing the HTML asset you wish to add and select that asset.
- 3. Click the Open button.

Note The asset may also be added to the DCM by double clicking the desired asset.

As illustrated in Figure 167, the selected asset is added and is displayed in the Material Display Area.

Figure 167. HTML Asset Added to DCM



The Properties and Information Areas display the attributes of the newly added HTML file.

Edit HTML Properties

All of the properties of an HTML asset may be set to a value other than the original value.

To change the values associated with an HTML asset, click on the value(s) you wish to change and enter the desired value via the methods explained below:

Name

Click in the name field and enter the desired HTML asset name (see Figure 168).

Figure 168. HTML Asset Name Entry



Category

Click in the Category field and then click the list button $[\nabla]$ that appears in the field to see the list of choices for that value. Select the desired value from the list of choices.

See Figure 169 for an example. The choices that appear in this list are dependent upon the Category names that have been created. See *Create a New Material Category on page 115* for more information.

Figure 169. HTML Category Selection



Length

Length is a numeric value and is adjusted by clicking the Length field and entering the desired length by using the keyboard or the arrows to increment or decrement the selected value. Length is expressed in hours:minutes:seconds (HH:MM:SS).

See Figure 170 for an example.

Figure 170. HTML Length Entry



File

If desired, the file associated with a DCM database record may be changed by browsing for a different file.

Note Only files not already registered in the DCM may be associated with an existing DCM entry.

Child Material

HTML files usually contain references to linked objects such as graphics, photos, icons, etc. These files need to be added as Child Material to the parent HTML file.

To add the Child files, do the following:

1. Click in the Child Material field.

A ChildFile Settings dialog appears as shown in Figure 171.

Figure 171. HTML ChildFIle Settings Dialog



- **2.** Click the **New** button and browse to the folder location which contains the child files for the selected parent HTML file.
- **3.** Select all of the child files which you wish to associate with the parent HTML file.

Note In the Files of type: drop-down list, select All Files(*) in order to see the files of all types that may exist in the child file folder.

- **4.** Click the Open button to add all selected files.
- **5.** The selected files appear in the ChildFile Settings dialog as illustrated in Figure 172.

Figure 172. HTML Child Files Selected



6. Click the Close button to associate the selected child files with the parent HTML file.

To preview the HTML asset, select Action>Preview from the Menu bar.

Add an Audio Asset

After switching the Material Display Area (see *Change Material Type Display on page 111* for more information) to the Audio material type, follow these steps to add new Audio content to the DCM:

- **1.** Do one of the following:
- Click the **New** button on the Tool bar.
- Select File>New from the Menu bar.
- Press the [CTRL]+[N] keys on the keyboard.

The Select Audio File dialog shown in Figure 173 appears.



Figure 173. Select Audio File Dialog

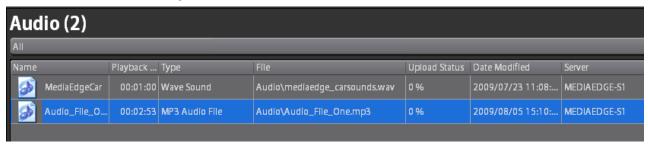
Note When an audio asset is selected, audio file attributes are displayed.

- **2.** Browse to the folder containing the audio asset you wish to add and select that asset.
- 3. Click the Open button.

Note The asset may also be added to the DCM by double clicking the desired asset.

As illustrated in Figure 174, the selected asset is added and is displayed in the Material Display Area.

Figure 174. Audio Asset Added to DCM



Note

Audio may be imbedded in a video file or played out as a separate file; However, there is only one audio decoder in the MediaEdge hardware playout devices. Audio from a video asset may be played or audio from a separate audio asset may be played, but, both cannot be played simultaneously.

The Properties and Information Areas display the attributes of the newly added Audio asset.

Edit Audio Properties

All of the properties of an audio asset may be set to a value other than the original value.

To change the values associated with an audio asset, click on the value(s) you wish to change and enter the desired value via the methods explained below:

Name

Click in the name field and enter the desired audio file name (see Figure 175).

Figure 175. Audio Name Entry



Category

Click in the Category field and then click the list button $[\nabla]$ that appears in the field to see the list of choices for that value. Select the desired value from the list of choices.

See Figure 176 for an example. The choices that appear in this list are dependent upon the Category names that have been created. See *Create a New Material Category on page 115* for more information.

Figure 176. Audio Category Selection



Playback Time

Playback time is a numeric value and is adjusted by clicking the Playback Time field and entering the desired playback time by using the keyboard or the arrows to increment or decrement the selected value. Playback time is expressed in hours:minutes:seconds (HH:MM:SS).

Note

In the case of an audio file which has an original playback time based on the length of the audio file, the playback time may only be shortened. The specified playback time cannot exceed the original playback time.

See Figure 177 for an example.

Figure 177. Audio Playback Time Entry



File

If desired, the file associated with a DCM database record may be changed by browsing for a different file.

Note

Only files not already registered in the DCM may be associated with an existing DCM entry.

Volume

Volume with a slider as illustrated in Figure 178. The slider scale is from 0% to 50%. Each tick mark represents a 5% change in volume.

Figure 178. Audio Volume Slider



Move the slider to the desired volume setting.

Create a URI Asset

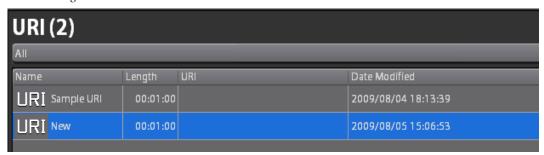
Uniform Resource Identifiers (Web page URLs, RSS feeds, UNC paths, etc.) may be added to the DCM database.

After switching the Material Display Area (see *Change Material Type Display on page 111* for more information) to the URI material type, follow these steps to add new URI content to the DCM:

- **1.** Do one of the following:
- Click the **New** button on the Tool bar.
- Select File>New from the Menu bar.
- Press the [CTRL]+[N] keys on the keyboard.

A new Uniform Resource Identifier (URI) asset is added to the DCM and is displayed in the Material Display Area as shown in Figure 179. See *Edit URI Properties on page 151* for information on entering the URI data.

Figure 179. URI Asset Added to the DCM



Edit URI Properties

All of the properties of a URI asset may be set to a value other than the original value.

To change the values associated with a URI asset, click on the value(s) you wish to change and enter the desired value via the methods explained below:

Name

Click in the name field and enter the desired URI asset name (see Figure 180).

Figure 180. URI Name Entry



Category

Click in the Category field and then click the list button $[\nabla]$ that appears in the field to see the list of choices for that value. Select the desired value from the list of choices.

See Figure 181 for an example. The choices that appear in this list are dependent upon the Category names that have been created. See *Create a New Material Category on page 115* for more information.

Figure 181. URI Category Selection



Length

Length is a numeric value and is adjusted by clicking the Length field and entering the desired length by using the keyboard or the arrows to increment or decrement the selected value. Length is expressed in hours:minutes:seconds (HH:MM:SS).

See Figure 182 for an example.

Figure 182. URI Length Entry



URI

The Uniform Resource Identifier can be any standard Internet resource reference such as a web page URL, RSS feed, UNC path, etc. Anything that can be entered into a browser to locate a resource on the Internet or local computer may be entered as a URI in the DCM.

Figure 183. URI Entry



Entering the example URI in Figure 183 into a browser results in the image display illustrated in Figure 184

Figure 184. URI Displayed in Browser

Previewing the URI within the DCM results in the image display illustrated in Figure 185.



Figure 185. URI Previewed in DCM

Create a Serial Command

A command is a string of ASCII or HEX characters that can be issued through a serial connection to control a device.

Serial commands are built by specifying the device vendor, the device model and the ASCII or HEX commands to control the device in the desired manner.

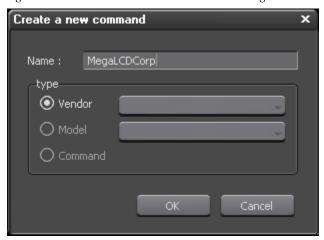
After switching the Material Display Area (see *Change Material Type Display on page 111* for more information) to the Command material type, follow these steps to create a new serial command in the DCM:

- **1.** Do one of the following:
- Click the New button on the Tool bar.
- Select File>New from the Menu bar.
- Press the [CTRL]+[N] keys on the keyboard.

The Create a new command dialog shown in Figure 186 appears.

If no vendors exist in Command Material Display Area, Vendor will be the selected type.

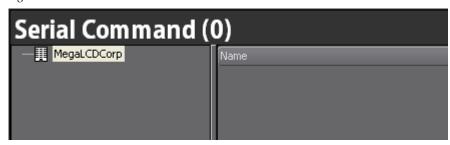
Figure 186. Create a New Command - Vendor Dialog



2. Enter then name of the device vendor and click the **OK** button.

The vendor is added to the left pane in the Serial Command Material Display Area as illustrated in Figure 187.

Figure 187. Vendor Added to DCM

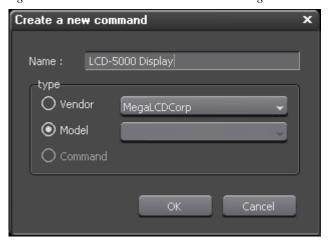


3. With the Vendor name selected, click the **New** button on the Tool bar.

The Create a new command dialog again appears.

4. Click on the Model radio button and enter the name of the device model you wish to create as shown in Figure 188.

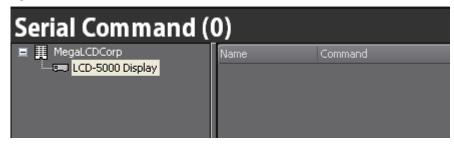
Figure 188. Create a New Command - Model Dialog



5. Click the **0K** button the add the model to the DCM and close the dialog.

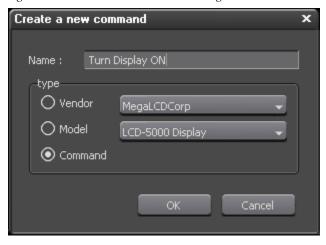
The device model now appears under the vendor in the left pane of the Serial Command Material Display Area as illustrated in Figure 189.

Figure 189. Model Added to DCM



- **6.** With the Model name selected, click the **New** button on the Tool bar. The Create a new command dialog again appears.
- 7. Click on the Command radio button and enter a name for the command as shown in Figure 190.

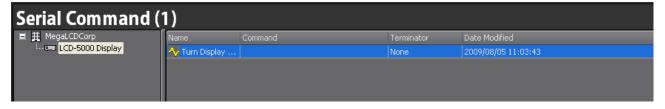
Figure 190. Create a New Command Dialog



8. Click the **OK** button the add the Command to the DCM and close the dialog.

A blank command entry is created in the Command Material Display Area as shown in Figure 191.

Figure 191. Serial Command Added to DCM



9. Proceed to *Edit Serial Command Properties* for information on creating a serial command string.

Edit Serial Command Properties

All of the properties of a Serial Command asset may be set to a value other than the original value.

To change the values associated with a Serial Command asset, select the command from the Serial Command Display Window, click on the value(s)

you wish to change in the Properties Window and enter the desired value via the methods explained below:

Name

Click in the name field and enter the desired Serial Command name (see Figure 192) if you wish to change the name previously entered.

Figure 192. Serial Command Name Entry



Model

Click in the Model field and then click the list button $[\nabla]$ that appears in the field to see the list of choices for that value. Select the desired value from the list of choices.

See Figure 193 for an example. The choices that appear in this list are dependent upon the Model names that have been created. See *Create a Serial Command on page 154* for more information.

Figure 193. Serial Command Model Selection



Command

To enter the serial command for controlling the selected device click in the Command field. The Edit Command dialog illustrated in Figure 194 appears.

Edit command × Command: 00 AE 1C 00 Code • HEX O ASCII Terminator O cr O lf CRLF O None O TAB O ESC O CTRL+C O SPACE Cancel

Figure 194. Serial Command Edit Command Dialog

Enter the following information:

Command

The sequence of control characters that are issued to the device to cause it to perform the desired action.

Note Consult the documentation for the designated device to learn what command sequences, formats and terminators are accepted for control of the device.

- Code type
 - Serial codes may be issued as ASCII or HEX characters
- Teminator

The special character (if any) that is needed to terminate a particular command sequence

After entering the required information for the selected command, click the **OK** button close the Edit command dialog.

Terminator

If you wish to change the terminator for the selected command, click in the Terminator field and select a new terminator in the Edit command dialog (see Figure 194).

Figure 195 shows a sample Serial Command Properties Window after all data has been entered.



Figure 195. Serial Command Properties Window

Create a Volume Asset

Volume assets are used to apply volume settings to material distributed through the DCM. By default, the DCM contains the following volume assets:

Volume 50

Sets volume of left and right channels at 50%.

Note Volume settings are cumulative; 50% to th

Volume settings are cumulative; 50% to the left channel and 50% to the right channel is a 100% (maximum) volume setting.

Volume 40

Sets volume of left and right channels at 40%.

Volume 30

Sets volume of left and right channels at 30%.

Volume Mute

Mutes volume on both left and right channels.

Volume Mute Cancel

Cancels the mute and restores volume to the previous level.

The manner in which volume settings affect the volume level is determined by the playout device as follows:

STB3-DS/STB4/STB4H/HDMA-4000/HDMA-4100

The volume setting specifies the decibel level of gain.

- Volume 50: 0dB gain
- Volume 40: -10 dB gain
- Volume 30: -20db gain
- Volume 20: -30dB gain
- Volume 10: -40dB gain

SWT3-DS/SWT4

The volume setting adjusts the PC volume level through the PC operating system with maximum volume specified by Volume 50 and minimum volume level specified by Volume 0 (may or may not be mute depending on PC OS volume settings).

After switching the Material Display Area (see *Change Material Type Display on page 111* for more information) to the Volume material type, follow these steps to create a new Volume asset in the DCM:

- **1.** Do one of the following:
- Click the **New** button on the Tool bar.
- Select File>New from the Menu bar.
- Press the [CTRL]+[N] keys on the keyboard.

The Volume Settings dialog shown in Figure 196 appears.

Volume Settings

Name: Volume 25

Type

○ Volume

Left: 25

Right: 25

Cancel mute

✓ Adjust simultaneously

Figure 196. Volume Settings Dialog

2. Enter the desired volume setting name.

Note Unless the default Mute and Mute Cancel volume assets have been deleted, there is no need to create volume assets of these types.

3. Set the volume level as desired for each channel.

NoteLeft and Right channels can be adjusted independently by clicking on the Adjust simultaneously checkbox to deselect this option. If this option remains selected, adjusting one channel adjusts the other to the same level.

4. Click the **OK** button to close the Volume Settings dialog and add the Volume asset to the DCM.

As shown in Figure 197, the volume asset is created and is displayed in the Volume Material Display Area.

Volume (6) Right Date Modified Volume 50 Volume 40 Volume 40 2009/07/23 11:08:34 Volume 30 Volume 30 2009/07/23 11:08:34 Volume Mute Mute None 2009/07/23 11:08:34 Volume Mute... Cancel m... None 2009/07/23 11:08:34 Volume 25 Volume

Figure 197. Volume Asset Added to DCM

Edit Volume Properties

All of the properties of a Volume asset may be set to a value other than the original value.

To change the values associated with a Volume asset, select the asset from the Volume Material Display Area, click on the value(s) you wish to change in the Properties Window and enter the desired value via the methods explained below:

Name

Click in the name field and enter the desired Volume asset name (see Figure 198) if you wish to change the name previously entered.

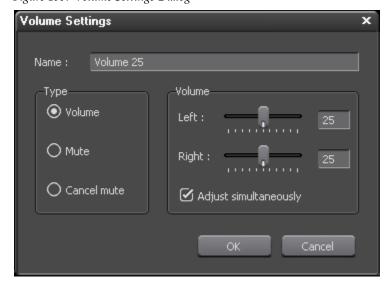
Figure 198. Volume Asset Name Entry



Type, Left and Right

All of these values are edited in the Volume Settings dialog. When you click on any of these fields, the Volume Setting dialog illustrated in Figure 199 appears.

Figure 199. Volume Settings Dialog



Edit the values as desired and click the **OK** button to close the dialog.

Preview Material

After making changes to the Properties of an asset, it is often useful to preview that asset to verify the changes. Of course, any asset of most material types can be previewed at any time.

Assets may be previewed be selecting Action>Preview... from the Menu bar or by right clicking on the desired asset and selecting Preview... from the menu or pressing the [P] key on the keyboard (see Figure 200).

Figure 200. Right Click Menu - Preview

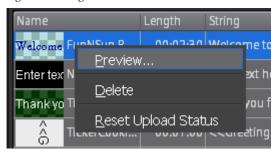


Figure 201 shows the attributes for a ticker in the Ticker Properties Window.

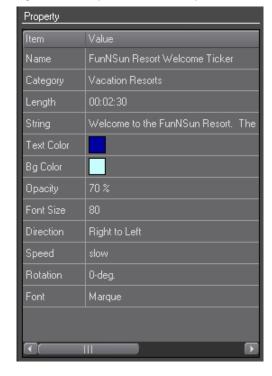


Figure 201. Sample Ticker Asset Properties

Figure 202 shows what the Preview window displays when the ticker asset is previewed.



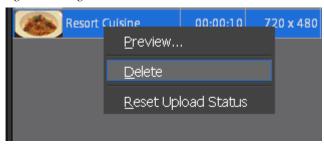
Figure 202. Ticker Preview Window

Delete Material

To delete material of any type from the DCM, do the following:

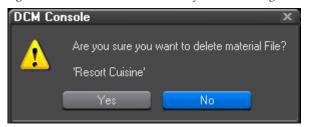
- 1. Change the Material Type Display to the material type containing the asset you wish to delete. See *Change Material Type Display on page 111* for more information.
- **2.** From the Material Type Display, select the asset you wish to delete.
- **3.** Do any of the following to delete the asset:
- Click the Delete button on the Tool bar.
- Select Edit>Delete from the Menu bar.
- Press the [**DEL**] key on the keyboard.
- Right click on the asset and select Delete from the menu or press the [**D**] key on the keyboard (see Figure 203).

Figure 203. Right Click Menu - Delete



If the selected material can be deleted, the DCM Console delete confirmation dialog shown in Figure 204 appears.

Figure 204. DCM Console Delete Confirmation Dialog



4. Click the **Yes** button to confirm deletion of the selected asset.

Note

If the asset selected for deletion is used in a playlist, the error dialog illustrated in Figure 205 appears. Click the **OK** button to close the message. Clear the asset from the indicated playlist if you wish to delete it and return to Step 1. An asset may be used in more than one playlist.

Figure 205. DCM Console Delete Material Error Dialog



Upload Registered Material to FTP Server

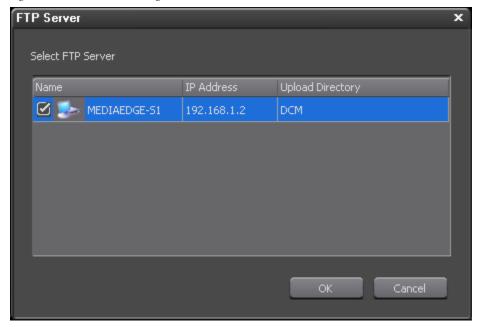
Material registered in the DCM must be uploaded to one or more FTP servers for distribution to the playout devices throughout the MediaEdge system. Each playout device will download the necessary material from the FTP server(s).

To upload registered material to an FTP server, follow these steps:

1. Select File>FTP>Upload from the Menu bar.

The FTP Server dialog shown in Figure 206 appears.

Figure 206. FTP Server Dialog

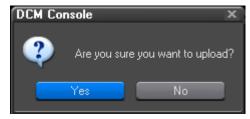


2. From the list of available FTP servers, select the FTP server(s) to which to upload registered content and click the **OK** button.

Note If more than one FTP server is displayed in the FTP Server dialog, all should be selected in order to ensure that all content is properly uploaded.

The DCM Console upload confirmation dialog illustrated in Figure 207 appears.

Figure 207. DCM Console Upload Confirmation



3. Click the **Yes** button to begin the upload of registered content to the selected FTP server(s).

During the upload process, several information dialogs such as those shown in Figure 208 will appear.

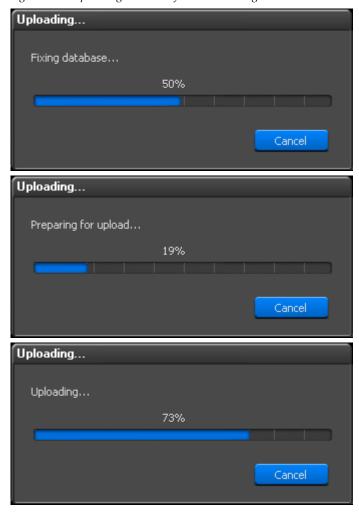


Figure 208. Uploading Process Information Dialogs

When the upload of registered content is complete, the Upload Result dialog illustrated in Figure 209 appears.

Note Depending upon the speed of the network and the amount and size of material to be uploaded, the upload process could take several minutes or several hours. If new material is registered often, FTP upload times can be minimized by performing this operation more frequently as only new registered material not previously uploaded is uploaded in any FTP upload session.

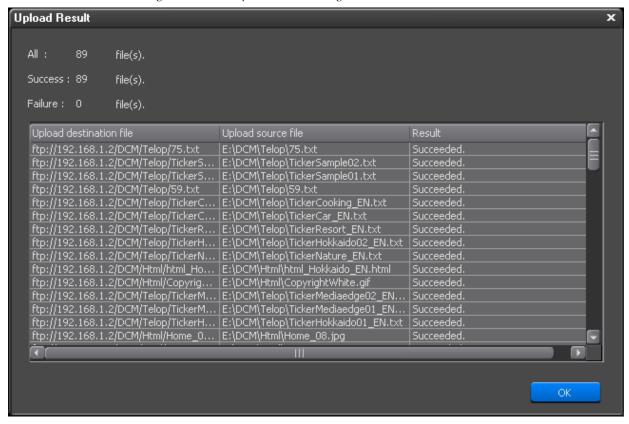


Figure 209. FTP Upload Results Dialog

4. Review the results and verify that all content uploaded successfully, then click the **OK** button to close the Upload Result dialog,

Content that has been successfully uploaded to an FTP Server will display 100% in the Upload Status column in the Material Display Area details view as illustrated in Figure 210.

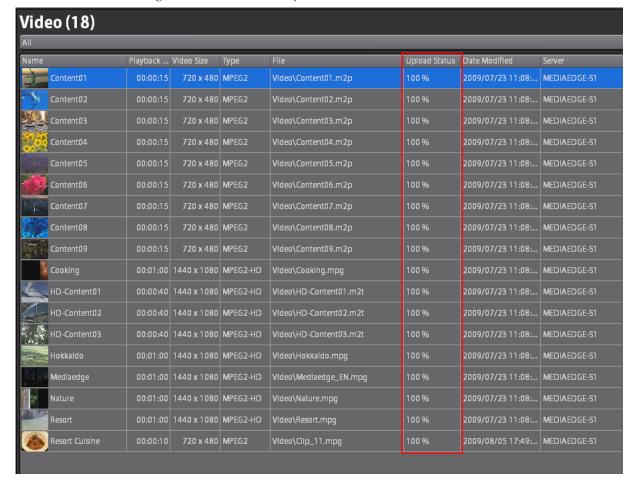


Figure 210. DCM Material Upload Status

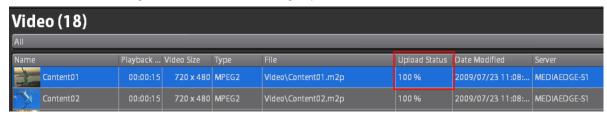
Reset Upload Status

If you want to force selected asset(s) to be uploaded again during the next FTP upload session, the upload status of a particular asset may be reset. This may be desirable if you know the original content has changed on disk storage since it was last uploaded to an FTP server.

To reset the upload status of an asset, do the following:

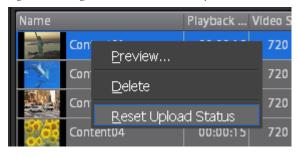
- 1. Switch the Material Display Area to the material type containing the asset for which you wish to reset upload status. See *Change Material Type Display on page 111* for more information.
- **2.** Select the asset for which you wish to reset upload status. See Figure 211.

Figure 211. Select Asset to Change Upload Status



3. Select Edit>Reset Upload Status from the Menu bar or right click on the asset and select Reset Upload Status from the menu or press the [R] key on the keyboard (see Figure 212).

Figure 212. Right Click Menu - Reset Upload Status



The DCM Console reset upload status confirmation dialog illustrated in Figure 213 appears.

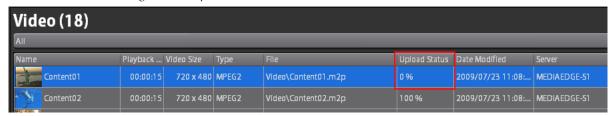
Figure 213. DCM Console Reset Upload Status Confirmation Dialog



4. Click the **Yes** button to reset the upload status of the selected asset.

As shown in Figure 214, the Upload Status of the selected asset is reset to 0% and the asset will be uploaded to the FTP server(s) during the next upload session.

Figure 214. Upload Status Reset



Download Material from FTP Server

Registered Material stored on an FTP server in the DCM folder structure may also be downloaded to the local DCM folder structure on the DCM Control PC. This may become necessary if files in the local DCM folder structure are accidentally deleted. Downloading from the FTP server will restore these files. In order to preview assets, they must exist in the local DCM database and on the local hard drive.

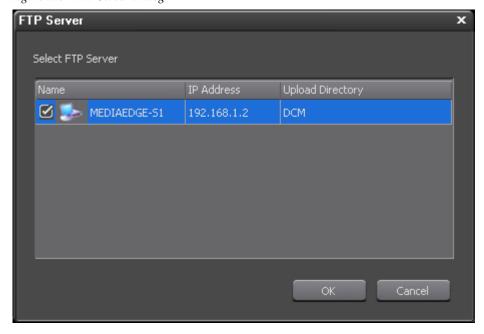
Note
Only registered content that does not exist in the local DCM folder structure will be downloaded. Files that are not registered in the DCM, but, exist in the FTP server folder structure are not downloaded. Files that exist in both locations are also not downloaded.

To download material from an FTP server, follow these steps:

1. Select File>FTP>Download from the Menu bar.

The FTP Server dialog shown in Figure 215 appears.

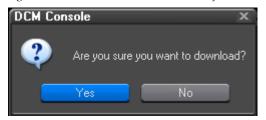
Figure 215. FTP Server Dialog



2. From the list of available FTP servers, select the FTP server(s) from which you wish to download content and click the **OK** button.

The DCM Console download confirmation dialog illustrated in Figure 216 appears.

Figure 216. DCM Console Download Confirmation



3. Click the **Yes** button to begin the download of content from the selected FTP server(s).

A Downloading progress dialog appears during the download process.

When the download of all missing files is complete, the Download Result dialog illustrated in Figure 217 appears.

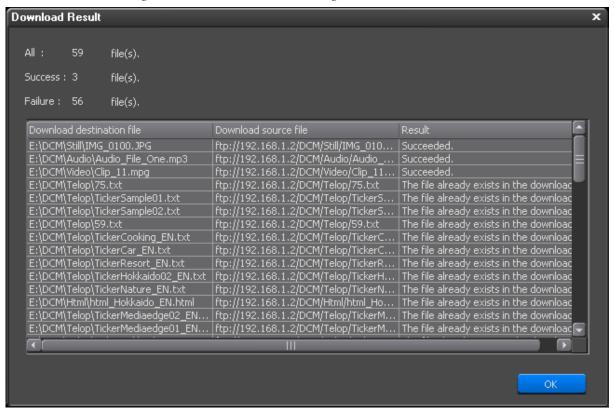


Figure 217. FTP Download Result Dialog

4. Click the **OK** button to close the dialog.

Layout Screen

The Layout screen is where multi-region digital signage display layouts are created and managed.

When the **Layout** button is selected from the Navigation bar, or, one of the methods explained in *Alternative Function Screen Access Methods on page 92* is used, the Layout Screen with its associated display areas and function bars appears as illustrated in Figure 218. These elements are used in the management of display screen layouts which determine the manner in which content registered in the DCM will be displayed by playout devices.

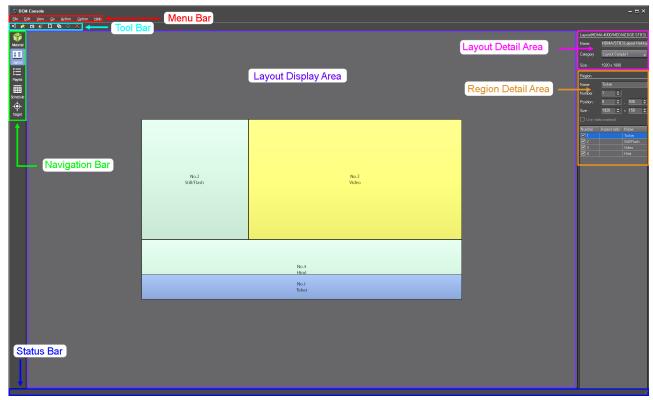


Figure 218. Layout Screen

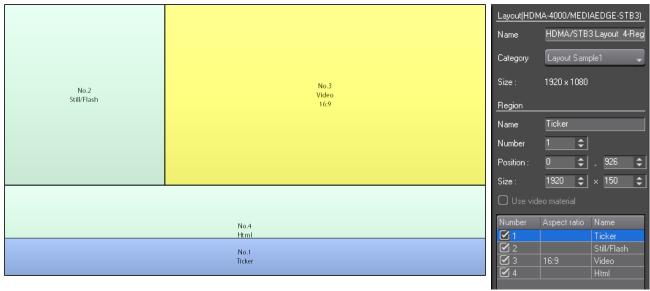
Note Figure 218 depicts the Layout Display Area with a screen layout open. The Layout Display Area will be blank when the Layout Screen is first accessed.

Layout Details

Layouts are comprised of one or more regions in which content may be displayed. When a new layout is created, the overall dimensions of the display area and of each content region are defined.

Figure 219 shows a display layout and the corresponding details that define this layout.

Figure 219. Layout Detail



Layout Name

The name assigned to the layout when it is created. The name can be modified at any time.

Layout Category

The layout category to which the layout belongs. Categories are user-defined.

Layout Size

The overall width and height, in pixels, of the entire defined display area (includes all regions).

Region Name

The name of the currently-selected region. This name is assigned when the region is created.

Region Number

A sequential number that represents the selected region within the layout. This number can be changed.

Region Position

The position of the upper left corner of the selected region within the defined layout dimensions. In the example above, the upper left corner of the Ticker region begins at a point 0 pixels horizontally from the left edge and 930 pixels vertically from the top of the layout.

Region Size

The dimensions of the selected region beginning at the Region Position coordinates. In the example above, the Ticker region is 1920 pixels horizontally by 150 pixels vertically beginning at position 0, 930 in the defined layout.

Use Video Material

This checkbox is selected if video material may be displayed in the region.

Enable/Disable Region

All the defined regions are listed with their region number, assigned aspect ratio (if any) and name. A check in the checkbox indicates the region is currently enabled within the layout. Removing the check mark disables the region and no content can be displayed in that region of the layout.

Manage Layout Categories

When opening a layout for editing, it is possible to limit the layout list to only those layouts that correspond to a specific layout category as well as a specific playout device.

The default Layout categories are:

- All (displays all layouts regardless of category)
- None (a category to which layouts not belonging to any other category may be assigned.)
- Layout Sample1 (some of the sample layouts are assigned to this category)
- Layout Sample2 (some of the sample layouts are assigned to this category)

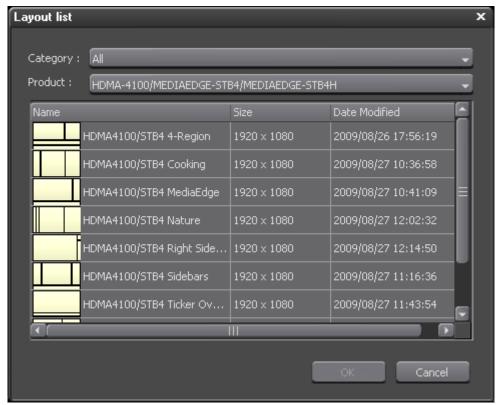
Open/Display Layouts by Category

To display only the layouts that are assigned to a specific category for a particular playout device, follow these steps.

- **1.** Do one of the following:
- Click the **Open** button on the Tool bar.
- Select File>Open... from the Menu bar.

The Layout List dialog illustrated in Figure 220 appears.

Figure 220. Layout List Dialog



2. Click the list button $[\nabla]$ on the Category selection drop-down and select the desired category from the list.

Note The category All displays all layouts for the selected Product (playout device) and not necessarily all defined layouts managed by the DCM.

3. Click the list button $[\nabla]$ on the Product selection drop-down and select the desired product (playout device) from the list.

After selecting the desired category and product, layouts that are assigned to the selected category for the selected product will be displayed.

4. Select the desired layout from the Layout list and click the **OK** button to open that layout.

Region Color Coding

Layout regions are color coded.

Selected Region

The selected region on all layouts, regardless of product type, is blue. See Table 3.

Non-Selected Regions

The color of non-selected regions depends upon the Product (playout device) to which the layout is assigned. See Table 3 for details.

Video Region

Region(s) for which the Use Video Material option is selected are yellow as shown in Table 3.

Note If a video-enabled region is selected, it will be blue instead of yellow. The SWT3-DS and SWT4 support up to four video-enabled regions.

Table 3. Layout Region Color Coding

Color	Region	Product	Color Name
	Non-Selected Video	All Products	Yellow
	Selected Region	All Products	Blue
	Non-Selected Non-Video	HDMA-4000/MEDIAEDGE-STB3	Green
	Non-Selected Non-Video	MEDIAEDGE-SWT3-DS	Orange
	Non-Selected Non-Video	HDMA-4100/MEDIAEDGE-STB4/ MEDIAEDGE-STB4H	Light Gold
	Non-Selected Non-Video	MEDIAEDGE-SWT4	Pink

A sample layout for each product (playout device) is illustrated in Figure 221.

HDMA 4000/ STB3 Non-Selected Non-Selected Video Region Region HDMA-4000 MEDIAEDGE-STB3 Selected Region No.1 Ticker MEDIAEDGE SWT3-DS lon-Selecte Non-Selected Video Region Region MEDIAEDGE-SWT3-DS-No.1 Ticker Selected Region HDMA 4100/ STB4/STB4H Non-Selected Video Region Region HDMA-4100 **MEDIAEDGE-STB4 MEDIAEDGE-STB4H** Selected Region No.2 Ticker MEDIAEDGE SWT4 Non-Selected Non-Selected Video Region Region MEDIAEDGE-SWT4 Selected Region No.3 Ticker

Figure 221. Region Color Coding

Note Color coding applies to the layout thumbnails in the Layout List dialog as well. The layout thumbnail color for each product is the same as the color for that product's non-selected, non-video regions.

Create a New Layout Category

New layout categories can be created to which layouts managed by the DCM can be assigned.

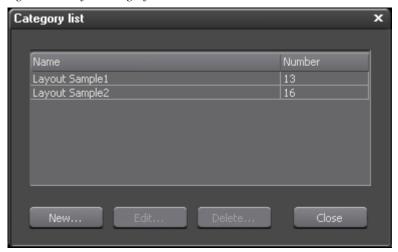
Follow these steps to create a new layout category:

- **1.** Do one of the following:
- Click the Category sutton on the Tool bar.
- Select File>Category... from the Menu bar.

Either action opens the Category List dialog box (see Figure 222) from which you can create, edit and delete layout categories.

Note The default categories "All" and "None" cannot be edited or deleted and, therefore, do not appear in the Category List dialog.

Figure 222. Layout Category List



Note The value in the Number column indicates how many layouts (for all product/playout devices) are currently assigned to the associated category.

2. Click the **New** button.

The Category Settings dialog shown in Figure 223 appears.

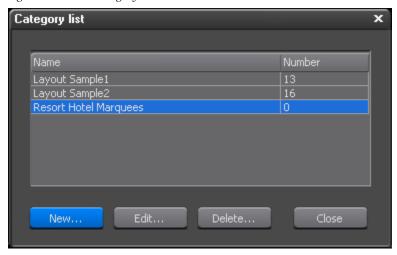
Figure 223. Category Settings Dialog



3. Enter the desired category name and click the **OK** button.

The Category List dialog reappears with the new category added to the category list (see Figure 224).

Figure 224. New Category Added



4. If desired, repeat Step 2 and Step 3 to add more categories.

Note See the next section for instructions on editing or deleting categories.

5. Click the **Close** button to exit the Category List dialog.

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Edit or Delete Categories

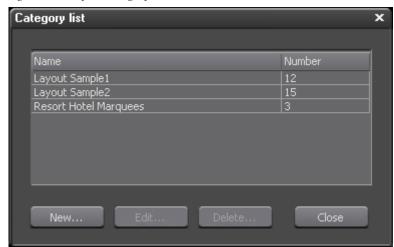
To edit or delete a category, follow these steps:

- **1.** Do one of the following:
- Click the **Category** button on the Tool bar.
- Select File>Category... from the Menu bar.

Either action opens the Category List dialog box (see Figure 225) from which you can create, edit and delete content categories.

Note The default categories "All" and "None" cannot be edited or deleted and, therefore, do not appear in the Category List dialog.

Figure 225. Layout Category List

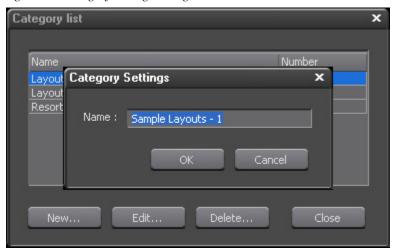


- **2.** Select the category you wish the edit or delete (the selected category will be highlighted in blue).
- 3. Click the Edit or Delete button as desired.

Note A category cannot be deleted to which layouts are currently assigned. In order to delete a category, all layouts assigned to that category must be reassigned.

If **Edit** was selected, the Category Settings dialog shown in Figure 226 appears.

Figure 226. Category Settings Dialog



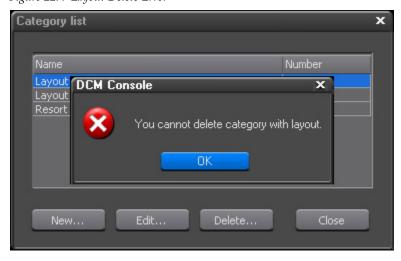
4. Edit the category name as desired and click the **OK** button.

The category name is changed.

Note Categories to which layouts have been assigned may be edited. The new category name will automatically appear in the Layout Details for any layout assigned to that category.

If **Delete** was selected, the error message illustrated in Figure 227 appears if attempting to delete a category to which layouts are currently assigned.

Figure 227. Layout Delete Error



If the category to be deleted is empty, the confirmation prompt shown in Figure 228 appears.

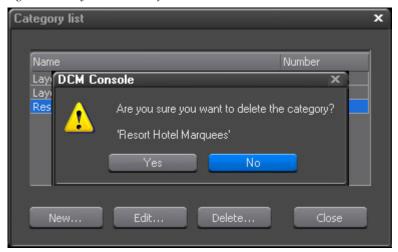


Figure 228. Layout Delete Confirmation

- 5. Click Yes to confirm deletion of the category.
- **6.** Click the **Close** button to exit the Category List dialog.

Create a Display Layout

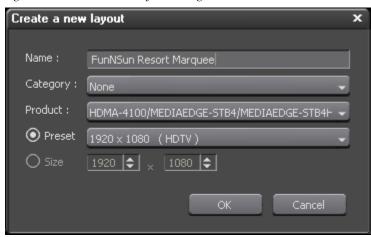
After switching to the Layout screen, follow these steps to create a new display layout:

CAUTION All actions involved with creating or modifying a layout are automatically saved. There is no "save" action in the DCM. This does mean, however, that there is no way to go back to the previously saved version of a layout before the modifications in a layout design session. Individual actions can be undone, but, the layout cannot be restored to a "previously saved" state.

- **1.** Do one of the following:
- Click the **New button** on the Tool bar.
- Select File>New...>Layout... from the Menu bar.

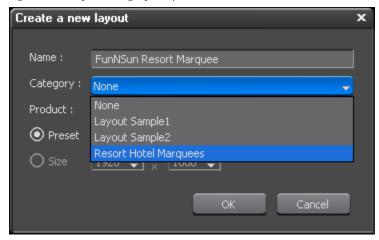
The Create a New Layout dialog shown in Figure 229 appears:

Figure 229. Create a New Layout Dialog



- **2.** Enter the desired name for the new layout.
- **3.** Click the list button $[\nabla]$ on the Category selection drop-down and select the desired category from the list. See Figure 230.

Figure 230. Layout Category Drop-Down List



4. Click the list button $[\nabla]$ on the Product selection drop-down and select the desired product (playout device) from the list. See Figure 231.

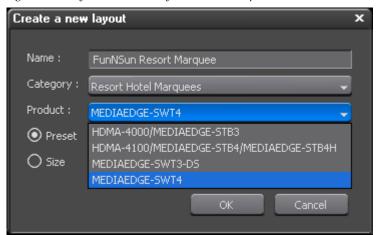


Figure 231. Layout Product (Playout Device) Drop-Down List

- **5.** If the MEDIAEDGE-SWT3-DS or MEDIAEDGE-SWT4 is the selected product, click the Preset radio button if you wish to select from a list of predefined size presets or the Size radio button if you wish to specify the layout dimensions. If a hardware playout device is selected, proceed to Step 7.
- **6.** Enter the desired layout size from the Preset list by clicking the list button $[\nabla]$ to display the preset sizes (see Figure 7) or by entering the desired layout dimensions in the Size horizontal and vertical fields.

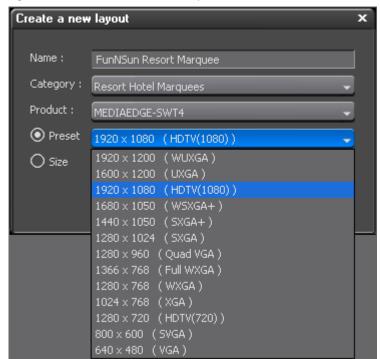


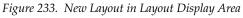
Figure 232. SWT3-DS and SWT4 Drop-Down List Selections

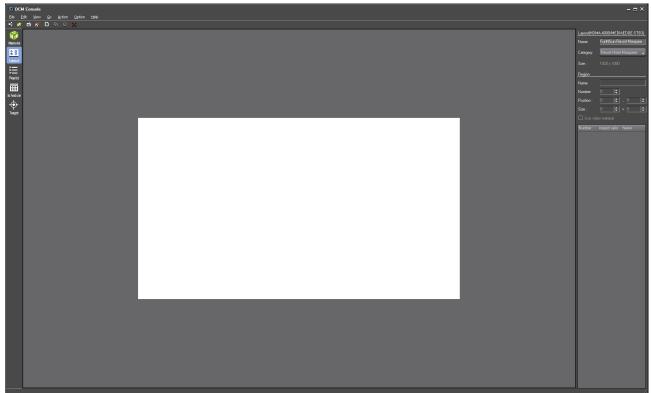
Note

The hardware playout devices (HDMA-4000/HDMA-4100/STB3/STB4/STB4H) have a fixed layout size of 1920x1080. Layouts for the SWT3/SWT4 may be any size from 480x480 to 1920x1920. Layout size is expressed in horizontal pixels x vertical pixels.

7. Click the **OK** button to close the Create a New Layout dialog.

A blank white rectangle representing the new layout appears in the Layout Display Area as shown in Figure 233.

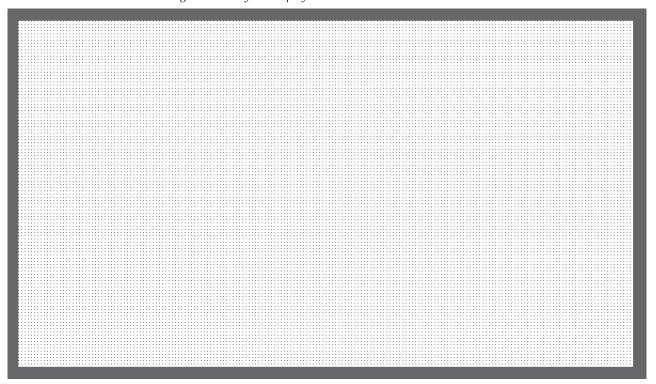




Define Layout Display Grid

A layout grid (see Figure 234) may be defined to assist in the process of placing display regions within the layout dimensions. By default, this grid is disabled.

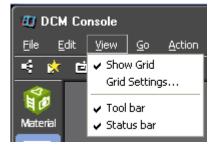
Figure 234. Layout Display Grid



Enable/Disable Grid

To enable or disable the layout grid display, select View>Show Grid from the Menu bar (see Figure 235). This action toggles the display On or Off depending on its current setting.

Figure 235. Show Grid Settings



If a check mark is displayed by Show Grid, the grid display is enabled; if no check mark is present, grid display is disabled.

Change Grid Settings

The default grid settings display a 5x5 grid. A smaller number displays more grid marks in a given area. A larger number displays fewer grid marks.

To change the grid settings, Select View>Grid Settings... from the Menu bar. The Grid Settings dialog shown in Figure 236 appears.

Figure 236. Grid Settings Dialog



Set the width and height to the desired settings and click the **OK** button to close the dialog.

Create a Display Region

Display regions are defined areas within the layout in which content of a particular type may be displayed. Multiple regions can be created to display, for example, video, still images and a text ticker simultaneously.

Note

When creating a layout in which other display regions will be overlaid over a full-screen video region (see Figure 237 for an example), create all the non-video regions first; then, create the video region full screen and move it to the bottom layer. See *Change Region Order on page 195* for more information on ordering regions.

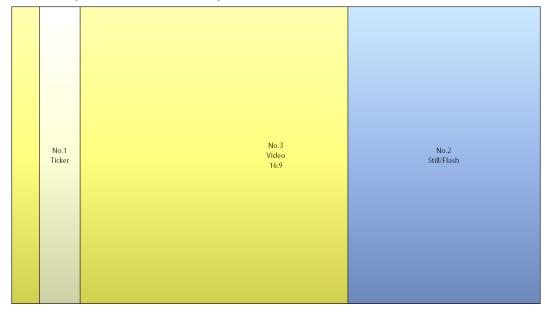


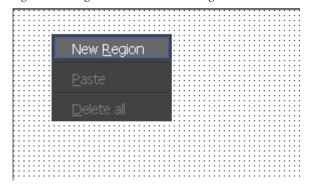
Figure 237. Ticker and Still Regions Over Full-Screen Video

To create a region within a display layout follow these steps:

- **1.** Do one of the following:
- Click the **New Region** button on the Tool bar.
- Select File>New...>Region from the Menu bar.
- Right click on a blank area within the layout and select New Region from the menu or press the [R] key on the keyboard (see Figure 238).

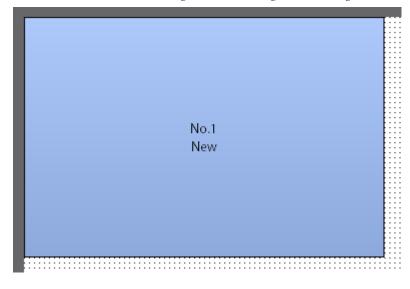
Note Every new region created using any of the above methods will be created in the upper left corner with the same initial size.

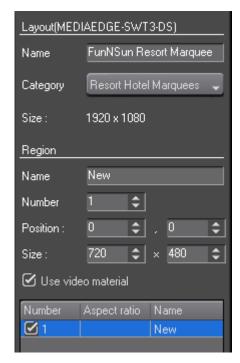
Figure 238. Right Click Menu - New Region



 Click on a desired corner location for a new region, hold down the left mouse button and drag the cursor in a blank area of the layout to draw a rectangle for the new region. Release the mouse button when you have drawn the region as desired. A new region is created and its details appear in the Region Detail Area as shown in Figure 238.

Figure 239. New Region and Settings

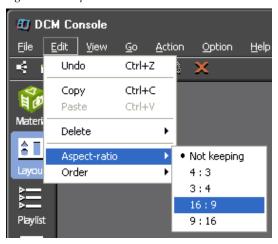




2. Adjust the region size as desired using one of the following methods:

Note If you want the region to have a certain aspect ratio, you may assign that ratio to the selected region by selecting Edit>Aspect-ratio>[aspect ratio] from the Menu bar (see Figure 240) or by right-clicking on the region and selecting the desired aspect ratio from the right-click menu.

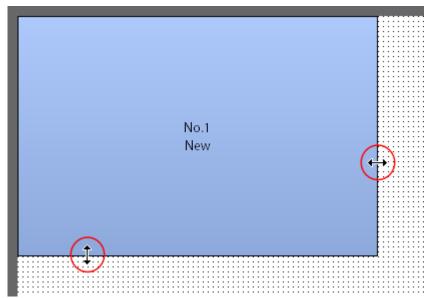
Figure 240. Aspect Ratio Menu



• Position the cursor at the horizontal or vertical edge of the region. When the cursor changes to the resize cursor, drag the region frame until the desired size is reached (see Figure 241).

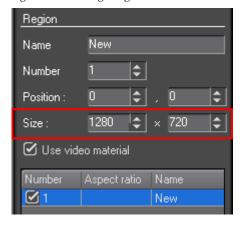
Note If an aspect ratio has been assigned to a region, increasing or decreasing one dimension of the region will automatically adjust the other region in order to maintain the selected aspect ratio.





• Enter the desired horizontal and vertical size dimensions (in pixels) in the Size boxes of the Region Detail Area (see Figure 242).

Figure 242. Change Region Size in Detail Area

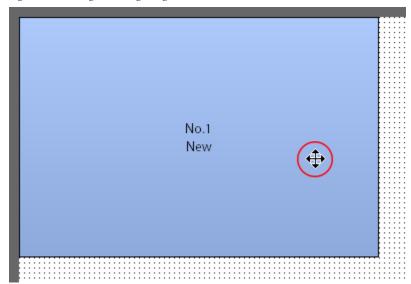


The size may be changed by entering a pixel count from the keyboard or using the UP and DOWN arrows on each field to increment or decrement the numbers until the desired dimensions are displayed.

NoteIf an aspect ratio has been assigned to a region, increasing or decreasing the horizontal dimension of the region will automatically adjust the vertical dimension of the region in order to maintain the selected aspect ratio.

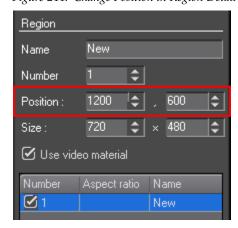
- **3.** Adjust the region position as desired using one of the following methods:
- Place the cursor over the region and hold down the left mouse button. When the cursor changes to the move cursor, drag the region to the desired position within the layout (see Figure 243).

Figure 243. Drag to Change Region Position



• Enter the desired horizontal and vertical position (in pixels) in the Position boxes of the Region Detail Area (see Figure 244).

Figure 244. Change Position in Region Detail Area



Note

The position numbers are relative to the upper left corner of the layout (position 0,0) and specify the position of the upper left corner of the region area. In this example, with a 1920x1080 pixel layout, moving the 720x480 region to position 1200, 600 moves the region from the upper left corner to the lower right corner of the layout as illustrated in Figure 245.

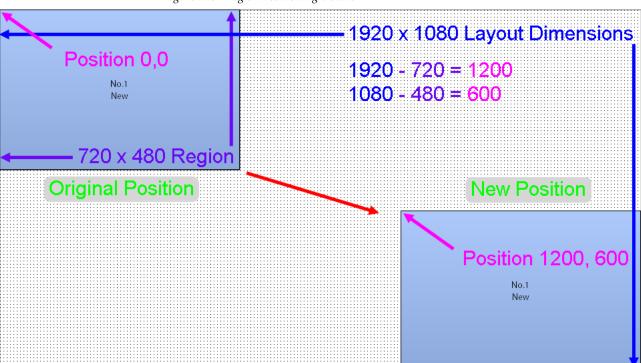
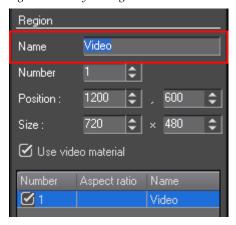


Figure 245. Region Positioning Details

4. Enter the desired name for the region by entering it in the Layout Details Name field as shown in Figure 246.

Note Region names do not limit the content that can be displayed in that region. Region names can be anything; however, a region name of "Video" does not designate that only video content can be displayed in that region. Most content can be displayed in any region.

Figure 246. Layout Region Name



5. If the region is one in which video material may be displayed, select the Use video material option.

Note

Layouts for the HDMA-4000/MEDIAEDGE-STB3 and HDMA-4100/MEDI-AEDGE-STB4/MEDIAEDGE-STB4H product type may contain only one video region. Layouts for the MEDIAEDGE-SWT3-DS and MEDIAEDGE-SWT4 may contain up to four video regions. If only one video region is allowed and a video region has already been specified, video must be disabled in the specified region before it can be enabled in another region.

Note A region defined to use video material may display material of any type, including video; however, only region(s) for which the Use video material option is selected may display video content.

6. Repeat Step 1 through Step 5 for any additional regions you wish to create in the layout.

Note As each new region is created, it becomes region number 1 and existing regions are renumbered. There is a limit of 20 regions per layout.

Note Although separate regions may be created in which you intend to place Ticker and Flash material, it is not possible to playback both a Ticker and a Flash animation simultaneously. Only one or the other may be played in addition to Video content.

Copy and Paste a Region

Existing regions within a layout may be copied and pasted on the layout. After copying and pasting a region, it may be renamed, moved, resized, etc. as desired.

To copy an existing region, do the following:

1. Select the region to be copied.

- **2.** Do one of the following:
- Click the **Copy b** button on the Tool bar.
- Select Edit>Copy from the Menu bar.
- Press the [CTRL]+ [C] keys on the keyboard.
- Right click on the region and select Copy from the menu or press the [C] key on the keyboard.
- **3**. To paste the copy on the layout, do one of the following:
- Click the **Paste** button on the Tool bar.
- Select Edit>Paste from the Menu bar.
- Press the [CTRL]+ [V] keys on the keyboard.
- Right click on the layout and select Paste from the menu press the [P] key on the keyboard.

Note After copying a layout region, multiple copies may be pasted on the layout using one of the above paste methods.

4. Rename, resize, move and reorder the layout regions as desired.

Change Region Order

Regions are assigned a region number in the order in which they are created. The region created last is always region number 1. As this does not necessarily represent the way in which you may wish to number the regions for management purposes, it is possible to change the region order.

Figure 247 represents a layout with multiple regions which you may wish to reorder in the following manner:

- The Video region is region number 1
- The Ticker region is region number 2
- The four Still/Flash regions are numbers 3-6 beginning with the region at the top of the layout.

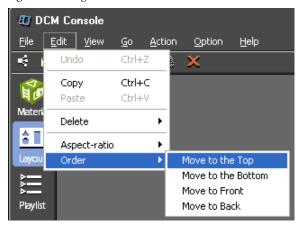
No.4 Still/Flash 4 4:3 No.3 No.5 Still/Flash 3 Video 4:3 16:9 No.2 Still/Flash 2 No.1 Still/Flash 1 No.6 4:3 Ticker

Figure 247. Layout with Multiple Regions to Reorder

To change the order of a region,

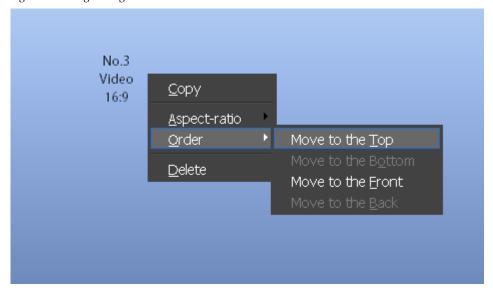
- 1. Select the region you wish to reorder (the selected region will be blue).
- **2.** Do one of the following:
- Select Edit>Order>[reorder selection] from the menu bar (see Figure 248).

Figure 248. Region Order Menu



• Right click on the region and select Order>[reorder selection] from the menu (see Figure 249) or press the [0] key on the keyboard and select the [reorder selection] from the menu.

Figure 249. Region Right Click Menu - Order



Select from the following choices to reorder the selected region:

- Move to the Top designate the region as region number 1
- Move to the Bottom Designate the region as the lowest numbered region.
- Move to the Front Make the region number one higher than its current number.
- Move to the Back Make the region number one less than its current number.

Note Any of the above actions will renumber all other regions (if needed) as well as reordering the selected region.

3. Repeat Step 1 through Step 2 for all regions you wish to reorder.

After changing the order of regions in the manner described in this section, the Region Details change as illustrated in Figure 250.

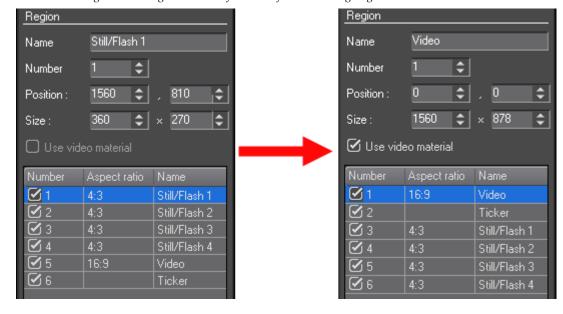


Figure 250. Region Detail Before and After Reordering Regions

Note In this example the four Still/Flash region names were also changed to reflect their new order.

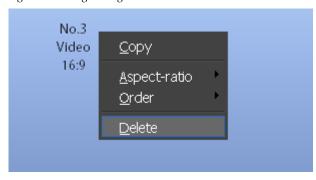
Note Removing the check mark next to a region number removes that region from the layout display. The region is not deleted, it is simply not displayed and the area it occupies in the layout is available for creating another region.

Delete a Region

To delete a region from a display layout, select the region to be deleted and follow these steps:

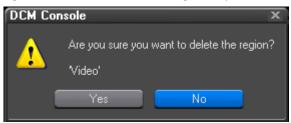
- **1.** Do one of the following:
- Click the Delete button on the Tool bar.
- Select Edit>Delete>Region from the Menu bar.
- Press the [**DEL**] key on the keyboard.
- Right click on the region and select Delete from the menu or press the [D] key on the keyboard (see Figure 251).

Figure 251. Region Right Click Menu - Delete



The DCM Console delete confirmation dialog shown in Figure 252 appears.

Figure 252. DCM Console Delete Region Confirmation Dialog



2. Click the Yes button to confirm deletion of the selected region.

Undo a Region Operation

If you perform an operation such as deleting a region, pasting a copy of a region, reordering a region, etc. in error, it is possible to undo these operations.

To undo an operation, do one of the following:

- Select Edit>Undo from the Menu bar.
- Press the [CTRL]+[Z] keys on the keyboard.

Note Operations are undone in reverse order with the most recent operation being reversed first. There are 10 levels of undo.

Copy a Display Layout

Another way to create a new layout is to copy an existing layout. This is very useful if an existing layout is very similar the new layout you wish to create. Copying this existing layout will allow you to simply make the necessary changes rather than creating the entire layout.

To copy an exiting layout, do the following:

- **1.** Open the layout you wish to copy (see *Open/Display Layouts by Category on page 176* for more information).
- **2.** Select Action>Copy Layout... from the Menu bar.

The Copy Layout dialog illustrated in Figure 253 appears.

Figure 253. Copy Layout Dialog



3. Enter the desired name for the new layout and click the **OK** button.

The new layout appears in the display area. With the exception of the layout name, the Layout and Region Details are a duplicate of the copied layout (see Figure 254).

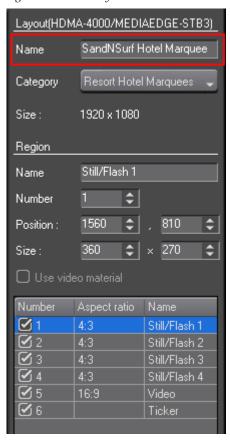


Figure 254. New Layout Details

4. Make any desired changes to the new layout.

Close a Layout

Opening a new layout closes the previously opened layout. Alternatively, you may select File>Close from the Menu bar to close the open layout and display a blank Layout Display Area.

Delete a Display Layout

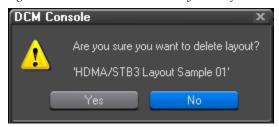
To delete a display layout from the DCM, follow these steps:

1. Open the display layout you wish to delete.

- **2.** Do one of the following:
- Click the **Delete Layout** button on the Tool bar.
- Select Edit>Delete>Layout from the Menu bar.

The DCM Console delete layout confirmation dialog illustrated in Figure 255 appears.

Figure 255. DCM Console Delete Layout Confirmation Dialog



3. Click the **Yes** button to confirm deletion of the selected layout.

CAUTION Deletion of a Layout cannot be undone. If you delete a layout and wish to restore it, the layout will need to be recreated.

Playlist Screen

The Playlist screen is where material and layouts are used to make playlists for playout devices.

When the **Playlist** button is selected from the Navigation bar, or, one of the methods explained in *Alternative Function Screen Access Methods on page 92* is used, the Playlist Screen with its associated display areas and function bars appears as illustrated in Figure 256. These elements are used to combine material registered in the DCM with the available screen layouts to create playlists.

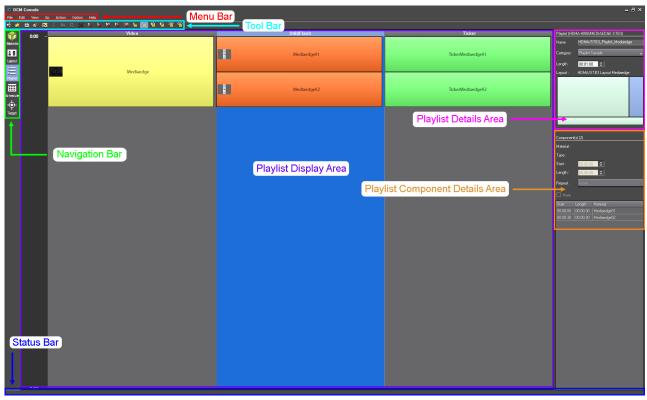


Figure 256. Playlist Screen

Note Figure 257 depicts the Playlist Display Area with a playlist open. The Playlist Display Area will be blank when the Playlist Screen is first accessed.

Playlist Details

The playlist is where the material registered in the DCM and the screen layouts that have been created come together to determine what content will be displayed and how it will be displayed.

Figure 257 shows a playlist and the corresponding details that define this playlist.

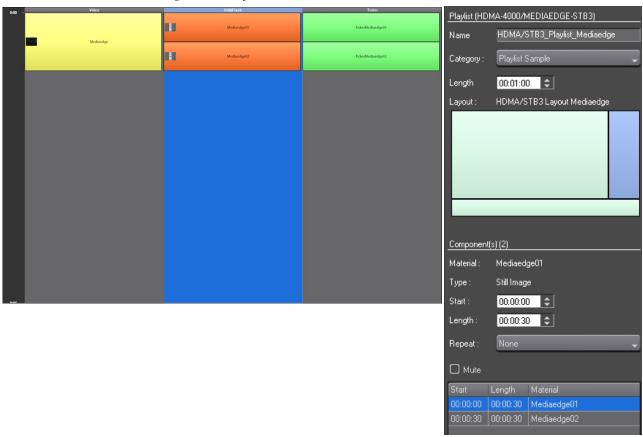


Figure 257. Playlist Detail

Playlist Name

The name assigned to the playlist when it is created. The name can be modified at any time.

Playlist Category

The playlist category to which the playlist belongs. Categories are user-defined.

Playlist Length

The overall length of the entire playlist. Length is expressed in Hours:Minutes:Seconds (HH:MM:SS)

Playlist Layout

The name of the display layout assigned to the playlist. The layout is assigned at the time the playlist is created. A layout thumbnail is also displayed.

Note

Layout thumbnails are color coded by product. Non-selected regions in layouts for the HDMA-4000/MEDIAEDGE-STB3 product are green. Non-selected regions in layouts for the MEDIAEDGE-SWT-DS are orange. Non-selected regions for the HDMA-4100/MEDIAEDGE-STB4/STB4H are light gold. Non-selected regions for the MEDIAEDGE-SWT4 are pink. The selected region for all layouts is blue.

Component Material

The name of the playlist component currently selected in the Region Component list.

Component Type

The material type of the component currently selected in the Region Component list.

Component Start Time

The starting time (relative to the beginning of the playlist) of the playlist component currently selected in the Region Component list.

Component Length

The length expressed in Hours:Minutes:Seconds (HH:MM:SS) of the playlist component currently selected in the Region Component list.

Component Repeat

The repeat setting of the playlist component currently selected in the Region Component list.

Component Mute

Mute setting of the playlist component currently selected in the Region Component list. If the component has audio, it may be muted or un-muted.

Region Components

The list of material files assigned to the layout region selected in the open playlist.

Manage Playlist Categories

When opening a playlist for editing, it is possible to limit the playlist list to only those playlists that correspond to a specific playlist category as well as a specific playout device.

The default Playlist categories are:

- All (displays all playlists regardless of category)
- None (a category to which playlists not belonging to any other category may be assigned.)
- Playlist Sample (sample playlists are assigned to this category)

Open/Display Playlist by Category

To display only the playlists that are assigned to a specific category for a particular playout device, follow these steps.

- **1.** Do one of the following:
- Click the **Open** 🖻 button on the Tool bar.
- Select File>Open... from the Menu bar.

The Playlist List dialog illustrated in Figure 258 appears.

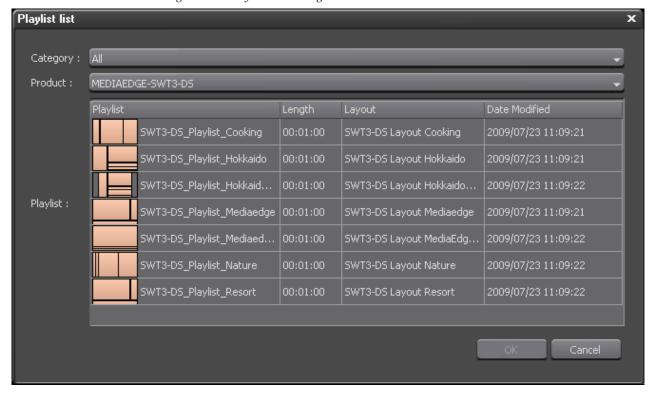


Figure 258. Playlist List Dialog

Note

Playlist thumbnails are color coded based on the selected Product (playout device). Playlist thumbnails for the HDMA-4000/MEDIAEDGE-STB3 product are green. Playlist thumbnails for the HDMA-4100/MEDIAEDGE-STB4/MEDIAEDGE-STB4H are light gold. Playlist thumbnails for the MEDIAEDGE-SWT-DS product are orange. Playlist thumbnails for the MEDIAEDGE-SWT4 are pink.

2. Click the list button $[\nabla]$ on the Category selection drop-down and select the desired category from the list.

Note The category All displays all layouts for the selected Product (playout device) and not necessarily all defined layouts managed by the DCM.

3. Click the list button $[\nabla]$ on the Product selection drop-down and select the desired product (playout device) from the list.

After selecting the desired category and product, playlists that are assigned to the selected category for the selected product will be displayed.

4. Select the desired playlist from the Playout list and click the **OK** button to open that playlist.

Create a New Playlist Category

New playlist categories can be created to which playlists managed by the DCM can be assigned.

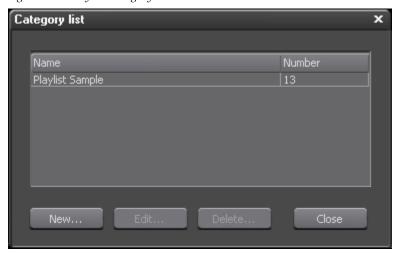
Follow these steps to create a new playlist category:

- **1.** Do one of the following:
- Click the Category button on the Tool bar.
- Select File>Category... from the Menu bar.

Either action opens the Category List dialog box (see Figure 259) from which you can create, edit and delete playlist categories.

Note The default categories "All" and "None" cannot be edited or deleted and, therefore, do not appear in the Category List dialog.

Figure 259. Playlist Category List

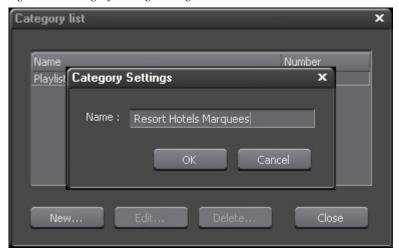


Note The value in the Number column indicates how many playlists (for all product/playout devices) are currently assigned to the associated category.

2. Click the New button.

The Category Settings dialog shown in Figure 260 appears.

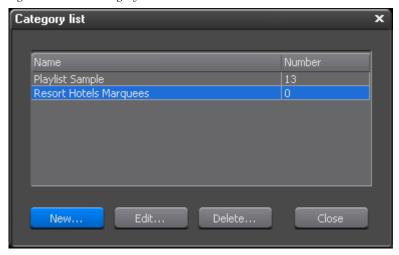
Figure 260. Category Settings Dialog



3. Enter the desired category name and click the **OK** button.

The Category List dialog reappears with the new category added to the category list (see Figure 261).

Figure 261. New Category Added



4. If desired, repeat Step 2 and Step 3 to add more categories.

Note See the next section for instructions on editing or deleting categories.

5. Click the **Close** button to exit the Category List dialog.

Edit or Delete Categories

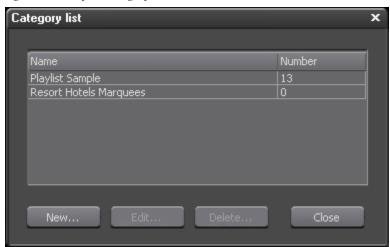
To edit or delete a category, follow these steps:

- **1.** Do one of the following:
- Click the Category button on the Tool bar.
- Select File>Category... from the Menu bar.

Either action opens the Category List dialog box (see Figure 262) from which you can create, edit and delete content categories.

Note The default categories "All" and "None" cannot be edited or deleted and, therefore, do not appear in the Category List dialog.

Figure 262. Playlist Category List



- **2.** Select the category you wish the edit or delete (the selected category will be highlighted in blue).
- 3. Click the Edit or Delete button as desired.

Note A category cannot be deleted to which playlists are currently assigned. In order to delete a category, all playlists assigned to that category must be reassigned.

If **Edit** was selected, the Category Settings dialog shown in Figure 263 appears.

Name
Playlist Category Settings
Resort
Name: 5ample Playlists

OK Cancel

New... Edit... Delete... Close

Figure 263. Category Settings Dialog

4. Edit the category name as desired and click the **OK** button.

The category name is changed.

Note Categories to which playlists have been assigned may be edited. The new category name will automatically appear in the Playlist Details for any playlist assigned to that category.

If **Delete** was selected, the error message illustrated in Figure 264 appears if attempting to delete a category to which playlists are currently assigned.

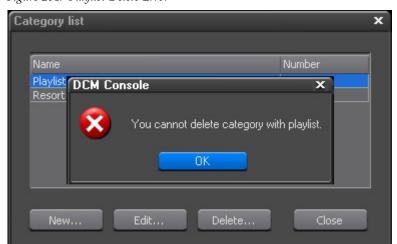


Figure 264. Playlist Delete Error

If the category to be deleted is empty, the confirmation prompt shown in Figure 265 appears.

Name
Play
DCM Console
Res
Are you sure you want to delete the category?
'Resort Hotels Marquees'
Yes
No

New...
Edit...
Delete...
Close

Figure 265. Playlist Delete Confirmation

- **5.** Click **Yes** to confirm deletion of the category.
- **6.** Click the **Close** button to exit the Category List dialog.

Create a Playlist

After switching to the Playlist screen, follow these steps to create a new playlist:

CAUTION All actions involved with creating or modifying a playlist are automatically saved. There is no "save" action in the DCM. This does mean, however, that there is no way to go back to the previously saved version of a playlist before the modifications in a playlist design session. Individual actions can be undone, but, the playlist cannot be restored to a "previously saved" state.

- **1.** Do one of the following:
- Click the **New** button on the Tool bar.
- Select File>New... from the Menu bar.

The Create a New Layout dialog shown in Figure 266 appears:

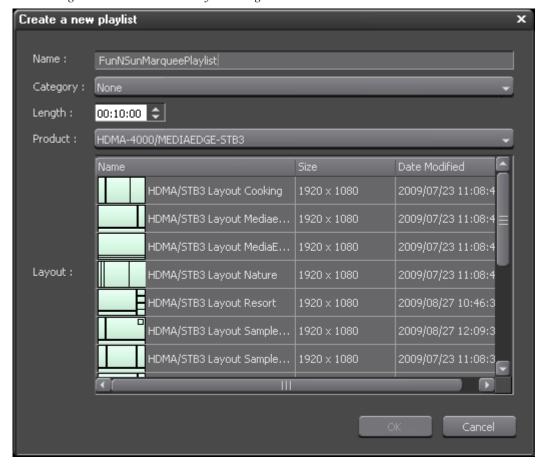


Figure 266. Create a New Playlist Dialog

2. Enter the desired name for the new playlist.

Note Spaces are not allowed in Playlist names.

3. Click the list button $[\nabla]$ on the Category selection drop-down and select the desired category from the list. See Figure 267.

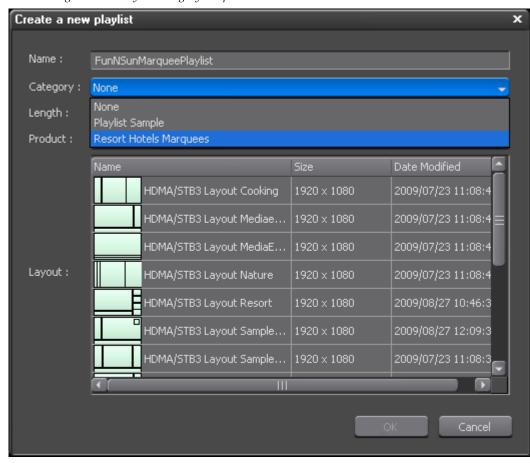


Figure 267. Playlist Category Drop-Down List

4. Set the desired length for the playlist by entering the desired running time in Hours:Minutes:Seconds (HH:MM:SS)

Note The length is the total running time for this playlist. When playlist has finished, a new playlist will be run if scheduled.

5. Click the list button $[\nabla]$ on the Product selection drop-down and select the desired product (playout device) from the list. See Figure 268.

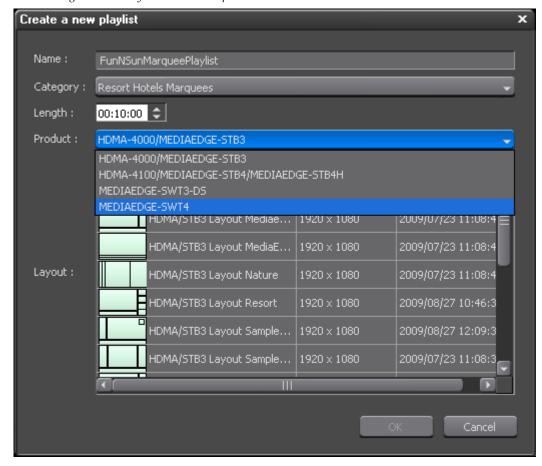


Figure 268. Playlist Product Drop-Down List

6. From the list of available layouts for the selected category and product, select the desired layout for this playlist. See Figure 269.

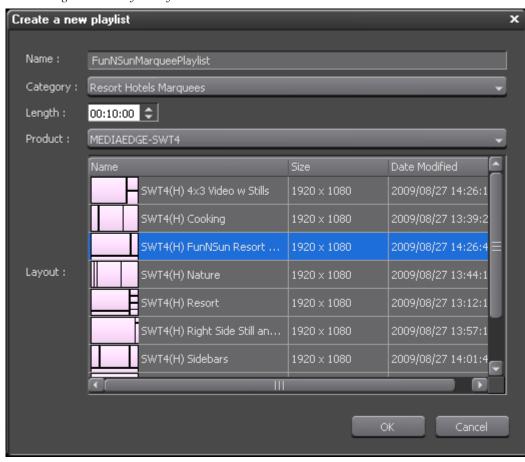


Figure 269. Playlist Layout Selection

7. Click the **OK** button to close the dialog and create the new playlist. If you have a space in the playlist name, the error dialog in Figure 270 appears,

Figure 270. Space in Name Error Dialog



8. Click the **OK** button to remove the space(s) in the name and create the playlist.

The new empty playlist appears in the Playlist Display Area as illustrated in Figure 271.

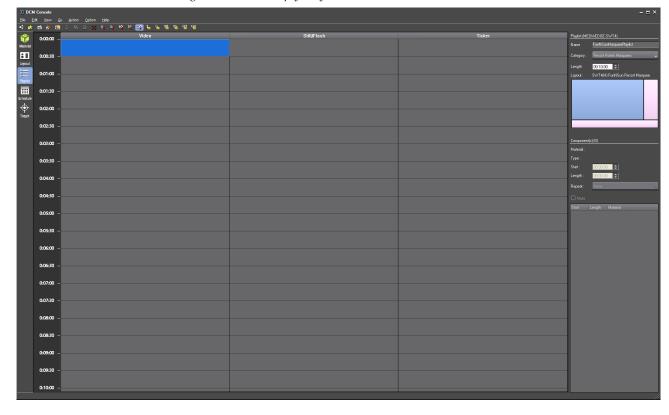


Figure 271. New Empty Playlist

Adjust the Playlist Time Scale

When a new playlist is created, the DCM assigns the last selected time scale increment to the Playlist Display Area.

If you wish to change the time scale increment in the Playlist Display Area, use the Tool Bar Time Scale selection buttons illustrated in Figure 272.

Figure 272. Playlist Tool Bar - Time Scale Buttons



The currently-selected time scale increment is highlighted in light blue. In the example above, the 5m (five minute) increment is selected.

To change the time scale increment, click the button icon that corresponds to the desired increment as illustrated in Table 4. Alternatively, you may use the listed Menu bar method or keyboard shortcut.

Table 4. Material Type Display Icons and Menu Alternatives

lcon	Increment	Menu Bar Method	Keyboard Shortcut
1,8	1 Second	View>Time Scale>1Sec.	[SHIFT]+[1]
5,	5 Seconds	View>Time Scale>5Sec.	[SHIFT]+[2]
10	10 Seconds	View>Time Scale>10Sec.	[SHIFT]+[3]
15	15 Seconds	View>Time Scale>15Sec.	[SHIFT]+[4]
38	30 Seconds	View>Time Scale>30Sec.	[SHIFT]+[5]
1 _m	1 Minute	View>Time Scale>1Min.	[ALT] +[1]
5	5 Minutes	View>Time Scale>5Min.	[ALT] +[2]
10	10 Minutes	View>Time Scale>10Min.	[ALT] +[3]
15	15 Minutes	View>Time Scale>15Min.	[ALT] +[4]
an	30 Minutes	View>Time Scale>30Min.	[ALT] +[5]
eth	60 Minutes	View>Time Scale>60Min.	[ALT]+[6]

The time scale increment helps you position material in the playlist and gives a visual indication of the length of the material as well as the length of the playlist.

Figure 273 shows the new Playlist created above with a 30 Second time scale increment rather than the 5 Minute increment initially assigned.

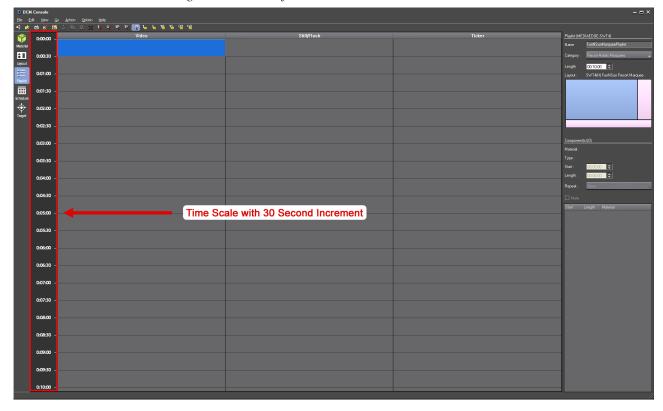


Figure 273. New Playlist with 30 Sec. Time Scale Increment

Assign Material to Playlist

Playlists are linked to display layouts which determine the regions to which material needs to be assigned for playout. In the example illustrated in Figure 274, the layout assigned to the playlist has three regions; Video, Still/Flash and Ticker. A column is created in the playlist that corresponds to each layout region.

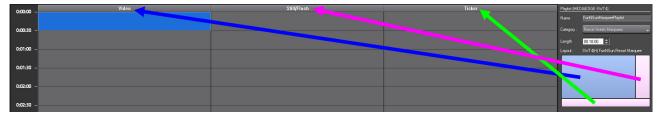


Figure 274. Playlist Layout Details

As shown in Figure 274, the selected region (Video - in this example), is highlighted in blue in the layout thumbnail and in the playlist.

Details for the selected region appear in the Component Details Area.

Content is assigned to the playlist by following these steps:

- **1.** Do one of the following:
- Click the Show bin window button on the Tool bar.
- Select View>Bin Window from the Menu bar.
- Right click on the Playlist Display Area and select Bin Window from the menu or press the [B] key on the keyboard.
- Press the [CTRL]+[B] keys on the keyboard.

The Material Bin Window shown in Figure 275 appears.

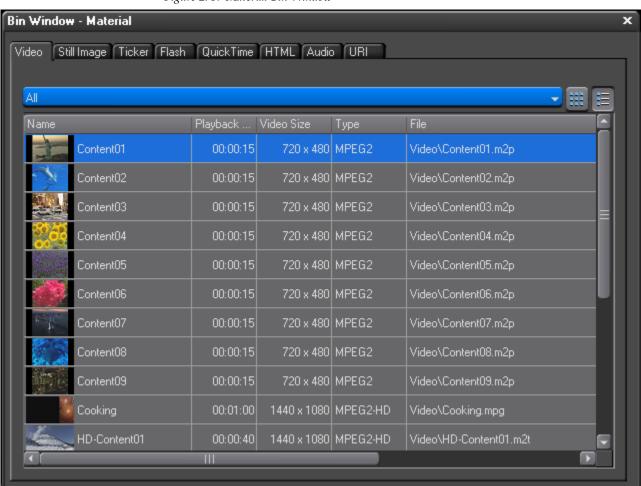


Figure 275. Material Bin Window

All of the material registered in the DCM is accessible in the Material Bin Window. The material is organized by material type with a tab at the top of the window for each material type.

The view style can be toggled between the details view shown in Figure 275 and the thumbnails view.

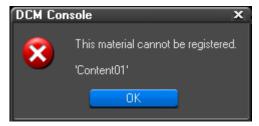
- 2. Select the desired material view by using the **Thumbnail** button and the **Details** button in the Material Bin Window.
- **3.** Click the tab that represents the type of material you wish to assign to a layout region in the playlist.

Only region(s) for which the Use Video Material option has been enabled can accept video material; however, content of any type can be assigned to these regions. They are not limited to only video material.

- **4.** Click the list button $[\nabla]$ on the Category drop-down list and select the category for which to display available material.
- **5.** Click and drag material from the Material Bin Window to the desired playlist material column at the desired start time. Drag the asset within the column to position it as desired.

Note If you try to place a video asset in a region that has not been designated to accept video material, the error dialog shown in Figure 276 appears. Click the **OK** button to close the dialog. Then place the video asset in an appropriate region.

Figure 276. Video Placement Error



- **6.** When the asset is positioned at the desired location in the playlist, click the left mouse button to anchor it at that point.
- 7. Click the Material Bin Window task bar item to reopen the window and repeat Step 2 through Step 6 to add additional content to the playlist.

Note If you do not want the Material Bin Window to minimize each time an asset is assigned to the playlist, you can elect to keep the bin window on top of the playlist until it is closed or to display it when it is minimized (see *Bin Window Display Settings on page 224* for more information).

8. When all the desired material is added to the playlist, click the X in the upper right corner of the Material Bin Window to close this window.

When finished assigning material to the playlist, it may resemble the example shown in Figure 277.



Figure 277. Material Added to Playlist

Material Color Coding

For easy identification of the type of assets in the playlist, each asset type is represented by a specific color as indicated in Table 5.

Table 5. Material Type Color Coding

Color	Material Type	Color Name
	Video	Yellow
	Still Image	Orange
	Ticker	Light Green
	Flash	Purple
	QuickTime	Bright Pink
	HTML	Light Blue

Table 5. Material Type Color Coding

Color	Material Type	Color Name	
	Audio	Dark Pink	
	URI	Turquoise	

Note

The material types Serial Command and Volume are not added to playlists. See *Assign Commands to a Command Channel on page 259* for more information on the use of these material types.

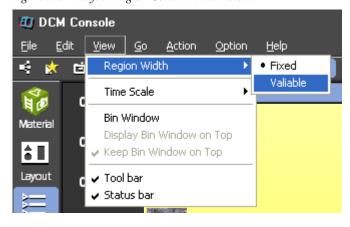
Adjust Region Column Width

By default, the region columns have a fixed width which is automatically set based on the number of region columns to be displayed.

If you want to adjust the width of individual columns, do the following:

1. Select View>Region Width>Variable from the Menu bar (see Figure 278).

Figure 278. Playlist Region Column Width Menu



2. Place the cursor on the column separator in the column header. The cursor changes to a resize cursor as shown in Figure 279.

Figure 279. Adjust Column Width



3. Drag the cursor to the left or right to decrease or increase the width of the column to the left of the cursor.

Note In the example above, dragging the cursor to the left decreases the width of the Video column; dragging the cursor to the right increases its width. This operation does not change the width of the Still/Flash column. If you increase the width of the Video column, the column(s) to the right may be pushed out of the Playlist Display Area. In this case, a horizontal scroll bar will appear at

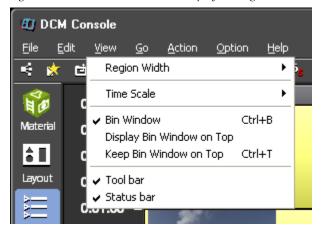
Select View>Region Width>Fixed to return all columns to a fixed width within the Playlist Display Area without a horizontal scroll bar.

Bin Window Display Settings

To change the way in which the Material Bin Window is displayed when assigning assets to a playlist, select the desired display setting from the view menu (see Figure 280).

Figure 280. Material Bin Window Display Settings

the bottom of the display area.



The choices are:

Display Bin Window on Top

When the Material Bin Window is minimized and not visible, selecting this option displays the Material Bin Window on top of the Playlist but does not keep it on top.

Keep Bin Window on Top

This selection keeps the Material Bin Window on top of the Playlist while positioning assets on the playlist. The Material Bin Window may be moved if it is in the way. When clicking on the Playlist to position an asset, the Material Bin Window appears transparent as illustrated in Figure 281.

Pressing the [CTRL]+[T] keys on the keyboard also sets the Bin Window display settings to Keep Bin Window on Top.



Figure 281. Transparent Material Bin Window

Copy a Playlist

One way to create a new playlist is to copy an existing playlist. This is very useful if an existing playlist is very similar the new playlist you wish to create. Copying this existing playlist will allow you to simply make the necessary changes rather than creating the entire playlist.

To copy an existing playlist, do the following:

- **1.** Open the playlist you wish to copy (see *Open/Display Playlist by Category on page 206* for more information).
- **2.** Select Action>Copy Playlist... from the Menu bar.

The Copy Playlist dialog illustrated in Figure 282 appears.

Figure 282. Copy Playlist Dialog



3. Enter the desired name for the new layout and click the **OK** button.

The new playlist appears in the display area. With the exception of the playlist name, the Playlist and Component Details are a duplicate of the copied playlist (see Figure 283).



Figure 283. New Playlist Details

4. Make any desired changes to the new playlist as explained in the next section - *Edit a Playlist*.

Edit a Playlist

After assigning material to a playlist, it may be necessary to adjust the length of one or more assets or even the playlist itself. It may be desirable to have some assets play repeatedly until the end of the playlist is reached or to play an asset, for example, three times before playing the next asset in the list. You may wish to delete a playlist component or assign additional material to the playlist.

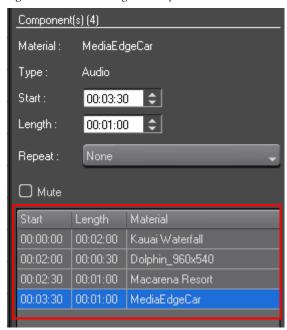
Adjust Material Start Time and Length

To increase or decrease the length of an asset in the playlist, do the following:

1. Click on a component for which you wish to adjust the length.

All of the components (assets) that exist in the selected region columns appear in the Components Detail Area as illustrated in Figure 284.

Figure 284. Selected Region Components



The current start time (24-hour clock) and length in Hours:Minutes:Seconds (HH:MM:SS) of each component is listed in the Start and Length columns.

2. In the Start: field of the Component Details area, enter the desired start time for the selected component or use the Up/Down arrow keys to increase or decrease the start time.

Note Clock times are in a 24-hour format in which 1:00pm is 13:00, 2:00pm is 14:00, etc. Start times can only be changed if the playlist length is sufficient to accommodate the asset in a new start time. See *Adjust Playlist Length on page 232* for more information.

- **3.** Press the [ENTER] key to set the new length for the selected component.
- **4.** In the Length: field of the Component Details Area, enter the desired length for the selected component (see Figure 285) or use the Up/Down arrow keys to increase or decrease the length.

Figure 285. Adjust Component Length

Note You cannot increase the length beyond the original creation playback time on assets such as video, Flash and audio files. However, you can decrease the length of these assets as illustrated in the example above.

5. Press the [ENTER] key to set the new length for the selected region component.

As shown in Figure 286, the length of the selected Audio asset was reduced from 00:01:00 (1 minute) to 00:00:45 (45 seconds).

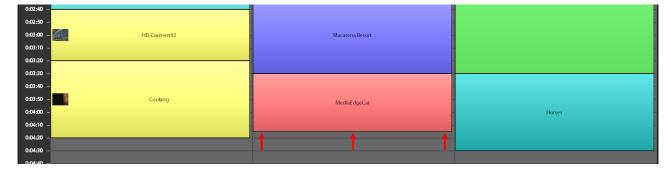


Figure 286. Component Length Adjusted in Playlist

CAUTION Start time and length adjustments may leave gaps between material in a playlist. These gaps will result in a black display in the playlist for the length of the gap. If this is not desired, adjust start time and length of adjacent assets to eliminate the gap.

Alternative Methods

• To change the start time, material objects can be dragged and dropped to a new location in the playlist.

Note If an asset is dropped in a location that overlaps another asset t, it will automatically be repositioned at the end of the overlapped asset.

• To change the length of an asset, the top or bottom border of the selected asset can be dragged to increase or decrease the length.

CAUTION If an asset border is dragged to a position that overlaps another asset, the border is set at the end of the overlapped asset with no gap between assets.

Repeat a Component

Rather than adding a number of unique assets to a playlist, it may often be desirable to repeat an asset a certain number of times or repeat as many times as possible until the end of the playlist is reached.

To repeat a component in the playlist, do the following:

- 1. Click on the component for which you wish to assign a repeat value.
- **2.** In the Component Details Area, click the list button $[\nabla]$ on the Repeat drop-down to see the list of choices for that value (see Figure 287).

Component(s) (5) Material: Resort Video Type: Start: 00:00:00 Length: 00:01:00 Repeat: None ☐ Mute for number of times for duration 00:00:00 00:01:00 Resort 00:01:00 00:00:40 | HD-Content01 00:02:40 00:00:40 | HD-Content02 00:03:20 00:01:00 Cooking

Figure 287. Playlist Component Repeat Drop-Down List

3. Select the desired repeat value from the list as explained below:

None

Default repeat value assigned to all components when they are added to the channel playlist. The component will play once and then the next component in the playlist is played.

For number of times and for duration settings determine the manner in which the dragged lower border on the component object behaves as illustrated in Figure 288.

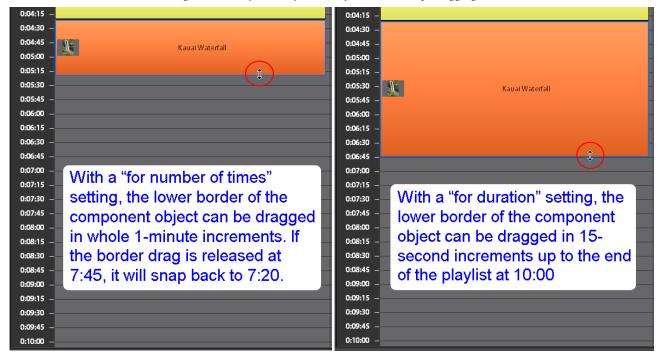


Figure 288. Adjust Component Object End Time by Dragging.

Note

The 1-minute increment in the "for number of times" setting above is a function of the original 1-minute length of the component. The component is repeated in its entirety as many times as possible.

Note

The 15-second increment in the "for duration" example above is a function of the time scale setting of 15S. If the time scale increment is 5S, the length of the component can be increased in five-second increments.

For number of times

Component will repeat in its entirety as many times as possible based on where your drag the lower border.

For example, if a component is 15-minutes in length and you drag the bottom border of the component 48 minutes beyond its current ending position, the end time will snap back to 45 minutes beyond the current end time since that is the closest full 15-minute increment.

If the component length is reduced by dragging, the component end time will also snap to the nearest full 15-minute increment.

For duration

Plays the component until the end of the one-day schedule or wherever the end point is set based on dragging the component lower object border.

Note

The exact end time is based on the time scale increment. The end time border snaps to the nearest increment (up to the end of the playlist) when the mouse button is released.

Adjust Playlist Length

To avoid playing black at the end of the last component (unless that is desirable), either the length of components need to be adjusted to match the length of the playlist, or the playlist needs to be adjusted to match the length of the components.

Figure 289 shows a playlist in which the length of the components in each region does not match up with the end of the playlist.

The playlist length is 00:05:30 and the material in the shortest column (Still/Flash) ends at 00:04:15.

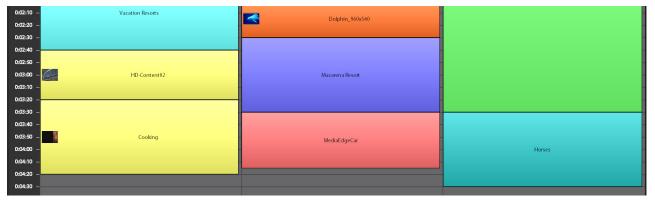


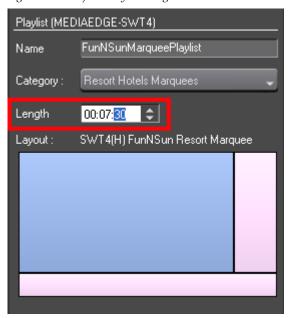
Figure 289. Playlist Length Longer Than Components

To adjust the playlist length, do the following:

1. In the Playlist Details Area, enter a new playlist length as illustrated in Figure 290.

In this example, we'll use the length of the shortest column (00:04:15).

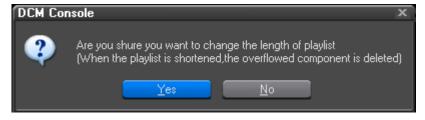
Figure 290. Adjust Playlist Length



The warning dialog illustrated in Figure 291 appears.

Note This warning appears anytime the playlist length is adjusted, even if the playlist length is increased.

Figure 291. Shorten Playlist Warning



This warning indicates that any material that runs past the new end of the playlist will be deleted, not simply shortened.

2. Click the **Yes** button to close the dialog and shorten the playlist length.

Note If you click the Yes button on this dialog, the "Cooking" video will be deleted from the Video column since it has an end time of 00:04:20 which is past the end time specified for the playlist. The "Horses" URI material will also be deleted as its end time is also past the specified end of the playlist.

The end result of changing the playlist length to 00:04:15 is shown in Figure 292.

Figure 292. Playlist Shortened to 00:04:15

Note

If you add any asset to the playlist that exceeds the length of the playlist, it will be truncated to fit the available time. For example, 55 seconds remain in the Video column from the end of the HD-Content02 video to the end of the playlist. If the Cooking video asset is added (total original length 1 minute) it will be shortened to 55 seconds.

In many cases, it is better to adjust the length of those assets that can be adjusted such that all columns end at the same time. Match the other assets up with the end length of the Video column, as this is often the focus of the display, and then shorten the playlist to this length. This is illustrated in Figure 293.

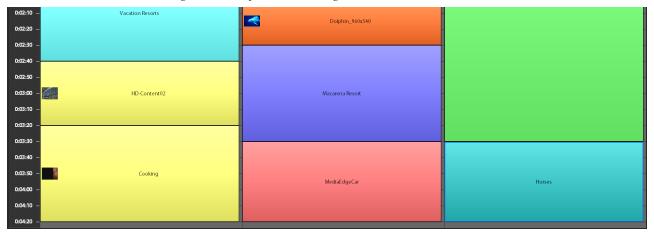


Figure 293. Playlist Column Lengths Matched

In the example in Figure 293, the MediaEdgeCar audio asset was lengthened by five (5) seconds to a length of 00:00:50 and the Horses URI asset was shortened by 15 seconds to a length of 00:00:50. This matched both assets end times with the 00:04:20 end time of the last video in the video column and the playlist was shortened to this length.

Cut, Copy and Paste Playlist Components

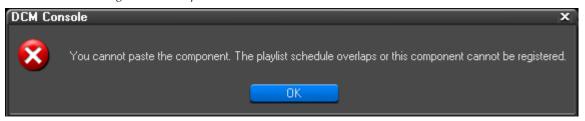
When building a playlist, it is often desirable to copy an existing component to another location in the playlist, or to remove a component from its current location and place it elsewhere in the playlist. The Cut, Copy and Paste operations allow you to do this.

To cut or copy an existing component and paste it in another location in the playlist, do the following:

- **1.** Select the component to be copied.
- **2.** Do one of the following:
- Click the Copy or Cut button on the Tool bar.
- Select Edit>Copy or Edit>Cut from the Menu bar.
- Press the [CTRL]+ [C] (Copy) or the [CTRL]+ [X] (Cut) keys on the keyboard.
- Right click on the component to be copied or cut and select Copy or Cut from the menu or press the [C] (Copy) or [T] (Cut) key on the keyboard.
- **3.** Click on the playlist at the position where you wish to place the copied or cut component.
- **4.** To paste the copied or cut component on the playlist, do one of the following:
- Click the **Paste** button on the Tool bar.
- Select Edit>Paste from the Menu bar.
- Press the [CTRL]+ [V] keys on the keyboard.
- Right click on the playlist and select Paste from the menu or press the [P] key on the keyboard.

If there is not sufficient time left in the playlist to accommodate the playlist component in the selected region, the error dialog shown in Figure 294 will appear.

Figure 294. Component Paste Error



Note After copying a playlist component, multiple copies may be pasted on the playlist using one of the above paste methods.

Delete a Component

To delete a component from a playlist, select the component to be deleted and follow these steps:

Do one of the following:

- Click the Delete button on the Tool bar.
- Select Edit>Delete>Component from the Menu bar.
- Press the [DEL] key on the keyboard.
- Right click on the component and select Delete from the menu or press the [D] key on the keyboard (see Figure 295).

Figure 295. Component Right Click Menu - Delete



Note There is no confirmation prompt for deleting a playlist component.

Undo a Component Operation

If you perform an operation such as deleting a component, pasting a copy of a component, cutting a component, etc. in error, it is possible to undo these operations.

To undo an operation, do one of the following:

- Select Edit>Undo from the Menu bar.
- Press the [CTRL]+[Z] keys on the keyboard.

Operations are undone in reverse order with the most recent operation being reversed first. There are 10 levels of undo.

Close a Playlist

Opening a new playlist closes the previously opened playlist. Alternatively, you may select File>Close from the Menu bar to close the open playlist and display a blank Playlist Display Area.

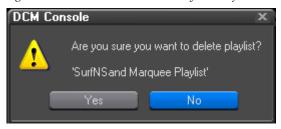
Delete a Playlist

To delete a display layout from the DCM, follow these steps:

- **1**. Open the playlist you wish to delete.
- **2.** Do one of the following:
- Click the **Delete Playlist** button on the Tool bar.
- Select Edit>Delete>Playlist from the Menu bar.

The DCM Console delete playlist confirmation dialog illustrated in Figure 296 appears.

Figure 296. DCM Console Delete Playlist Confirmation Dialog



3. Click the Yes button to confirm deletion of the selected playlist.

CAUTION Deletion of a playlist cannot be undone. If you delete a playlist and wish to restore it, the playlist will need to be recreated.

Preview a Playlist

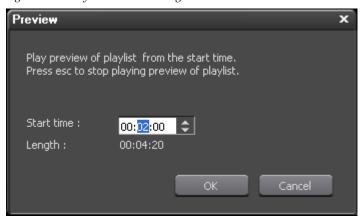
A playlist can be previewed beginning at any point in the playlist. The playlist preview displays the content assigned to the playlist in the layout assigned to the playlist. It is an accurate preview (appearance and sound) of a playlist on the intended playout device.

To preview a playlist do the following:

1. Select Action>Preview... from the Menu bar.

The Preview dialog illustrated in Figure 297 appears.

Figure 297. Playlist Preview Dialog



2. Enter the desired start time for the preview and click the **OK** button to begin the preview.

As shown in Figure 298, the preview is displayed on your monitor.

Figure 298. Playlist Preview



Welcome to the FunNSun Resort. The premiere island vacation

To stop the playlist preview before the end of the playlist, press the **[ESC]** key on the keyboard.

Schedule Screen

The Schedule screen is where channels are defined for playout devices and playlist assigned to those channels to create playout schedules.

When the **Schedule** button is selected from the Navigation bar, or, one of the methods explained in *Alternative Function Screen Access Methods on page* 92 is used, the Schedule Screen with its associated display areas and function bars appears as illustrated in Figure 299. These elements are used to add defined playlists to schedules for various playout channels.

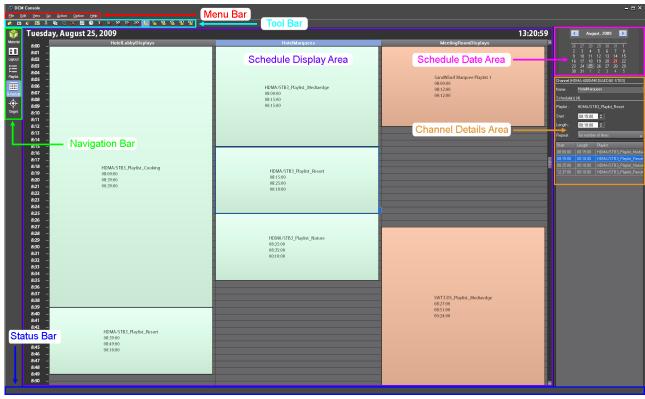


Figure 299. Playlist Screen

Note

Figure 299 depicts the Schedule Display Area with a schedule created by assigning playlists to three channels. The Schedule Display Area will be blank when it is first accessed.

Schedule Details

The schedule is where playlists which contain material are assigned to playout channels which are assigned to playout devices. Command channels may also be created for sending serial commands and volume settings to devices in the MediaEdge system.

Figure 300 shows a schedule for three playout channels and the corresponding detail that defines this schedule.

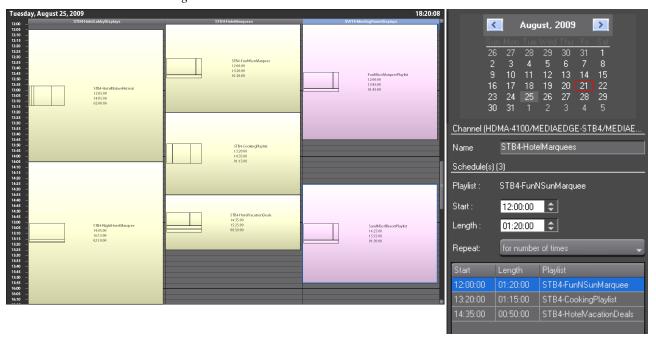


Figure 300. Schedule Detail

Date Selection Calendar

A calendar from which to select the date for playout of the scheduled playlist(s). See *Select Schedule Date on page 243* for more information.

Playout Device

The playout device to which the selected channel has been assigned.

Channel Name

The name assigned to the selected channel.

Playlist Name

The name of the playlist selected in the list of playlists assigned to the selected channel schedule.

Playlist Start Time

The start time of the playlist selected in the list of playlists assigned to the selected channel schedule.

Playlist Length

The length in Hours:Minutes:Seconds (HH:MM:SS) of the playlist selected in the list of playlists assigned to the selected channel schedule.

Playlist Repeat

The repeat setting of the playlist selected in the list of playlists assigned to the selected channel schedule.

Schedule Components

The list of playlist(s) assigned to the selected channel schedule.

As illustrated in Figure 301, if the time scale is set to an increment that allows sufficient expansion of the playlist object in the schedule, playlist details appear in the schedule as well. See *Open a Channel on page 248* for more information.

Figure 301. Playlist Details in Schedule



Adjust the Schedule Time Scale

When a new channel is created, or an existing channel is opened, the DCM assigns the last selected time scale increment to the Schedule Display Area.

If you wish to change the time scale increment in the Schedule Display Area, use the Tool Bar Time Scale selection buttons illustrated in Figure 302.

Figure 302. Schedule Tool Bar - Time Scale Buttons



The currently-selected time scale increment is highlighted in light blue. In the example above, the 1m (one minute) increment is selected.

To change the time scale increment, click the button that corresponds to the desired increment as illustrated in Table 6. Alternatively, you may use the listed Menu bar method or keyboard shortcut.

Table 6. Material Type Display Icons and Menu Alternatives

lcon	Increment	Menu Bar Method	Keyboard Shortcut
1,	1 Second	View>Time Scale>1Sec.	[SHIFT]+[1]
5,	5 Seconds	View>Time Scale>5Sec.	[SHIFT]+[2]
10	10 Seconds	View>Time Scale>10Sec.	[SHIFT]+[3]
15	15 Seconds	View>Time Scale>15Sec.	[SHIFT]+[4]
30	30 Seconds	View>Time Scale>30Sec.	[SHIFT]+[5]
1 _m	1 Minute	View>Time Scale>1Min.	[ALT]+[1]
5	5 Minutes	View>Time Scale>5Min.	[ALT]+[2]
100	10 Minutes	View>Time Scale>10Min.	[ALT]+[3]
15	15 Minutes	View>Time Scale>15Min.	[ALT]+[4]
an	30 Minutes	View>Time Scale>30Min.	[ALT]+[5]
ကေ	60 Minutes	View>Time Scale>60Min.	[ALT]+[6]

The time scale increment helps you position playlists in the schedule and gives a visual indication of the length of each playlist as well as the length of the schedule.

Select Schedule Date

Channel schedules are created for one 24-hour period at a time. Schedules do not span multiple days. However, a daily schedule can be copied to as many as 30 days, if desired. See *Copy a Schedule on page 270* for more information.

In the Schedule Details area, select the desired date for the schedule by selecting it from the calendar. See Figure 303.

Figure 303. Schedule Date Selection Calendar



In the example in Figure 303, August 25, 2009 is the date selected for the schedule. The current date (August 21, 2009), if visible on the calendar, will be outlined in red.

Click the **Previous Month** button or **Next Month** button to change the month from which you wish to select a date for the schedule.

Note

Selecting a date from the calendar allows you to create a new channel schedule on that date or view the existing channel schedule for the selected date.

Select Current Date

When examining a schedule, it may be desirable to see the schedule for the current date.

To set the schedule to the current date, click the **Move to Today** button on the Tool bar. As illustrated in Figure 304, when the Schedule Display Window is showing the current date, a Today indicator appears next to the date.

Figure 304. Today Indicator in Schedule Display Window



Note An alternative method is to select Go>Today from the Menu bar.

The Schedule Display Window timeline is also reset with the current time at the top of the time scale.

Select Current Time

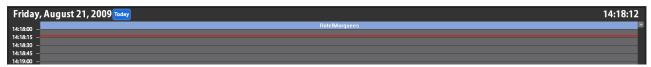
To set the schedule to the current time, click the **Move to the current time** button on the Tool bar. Alternatively, you can select Go>Current time from the Menu bar.

Note

Moving to the current time adjusts the time scale to begin at the current time on whatever date is currently displayed. If today's date is August 21 and you are setting the schedule for August 25, clicking **Move to the current time**, adjusts the time scale for August 25.

As shown in Figure 305, if the schedule timeline is on the current date (Today), a moving red line indicates the current time.

Figure 305. Timeline Cursor at Current Time



Regardless of the time at which playlists are inserted in the schedule or the time range visible on the time scale, the current time is always visible in the upper right corner of the Schedule Display Area.

Note

When scheduling playlists, the time at which a playlist will begin playing is always local time. For example, if a playlist is scheduled to begin playing at 10:00:00 (10 AM), it will begin playing at that time in the time zone in which the playout device is located. If the playout channel is assigned to playout devices in San Francisco, Dallas, New York and London, the playlist will be executed at 10 AM local time in the Pacific, Central and Eastern US time zones and at 10 AM GMT in London.

Channel Management

The operations in this section deal with the management of playout and command channels.

Create a Playout Channel

Before schedules can be assembled from the playlists, playout channels must be created. Channels are created for playout devices. Multiple chan-

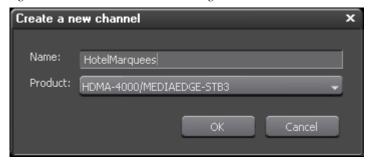
nels can be created for a playout device; however, at least one channel must exist before a schedule can be created.

To create a new channel, follow these steps:

- **1.** Set the schedule view to Channel by selecting View>Channel Type>Channel from the Menu bar (this is the default view).
- **2.** Do one of the following:
- Click the **New** button on the Tool bar.
- Select File>New... from the Menu bar.

The Create a New Channel dialog shown in Figure 306 appears:

Figure 306. Create a New Channel Dialog

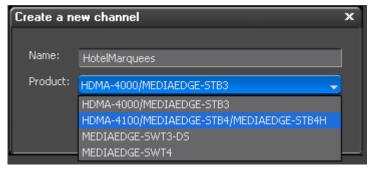


3. Enter the desired name for the new channel.

Note Spaces are not allowed in channel names.

4. Click the list button $[\nabla]$ on the Product selection drop-down and select the desired product (playout device) from the list. The new channel will be associated with this type of playout device only. See Figure 307.

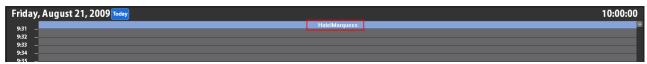
Figure 307. Channel Product Drop-Down List



5. Click the **OK** button to close the dialog and create the channel for the selected product.

The new channel name appears at the top of the Schedule Display Area as shown in Figure 308.

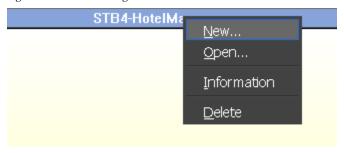
Figure 308. Channel Name in Schedule



6. Repeat Step 1 through Step 5 for any additional channels you wish to create.

NoteWith a channel created and open, a new channel can also be created by right-clicking on the channel name in the Schedule Display Area and selecting New... from the menu or pressing the [**N**] key on the keyboard. See Figure 309.

Figure 309. Channel Right Click Menu - New



Create a Command Channel

A command channel provides a mechanism for sending serial command sequences or volume settings to a particular device at a particular time.

For example, it may be desirable to send a Display ON or Display OFF command to a display in the MediaEdge system. For more information on creating serial commands, see *Create a Serial Command on page 154*.

To create a command channel schedule, do the following.

- 1. On the calendar, select the date for the command channel schedule. See *Select Schedule Date on page 243* for more information.
- 2. Select View>Channel Type>Command Channel from the Menu bar as shown in Figure 310.

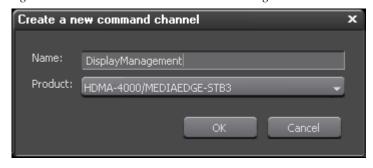
💯 DCM Console <u>View Go Action</u> <u>E</u>dit Option <u>H</u>elp Channel Width **▶** (3) 5. 10 白 Channel Type • Channel Command Channel Time scale Material HotelLobby Information Bin Window Layout Display Bin Window on Top Keep Bin Window on Top Tool bar Playlist Status bar 8:02

Figure 310. Select Command Channel View

- **3**. Do one of the following:
- Click the **New** button on the Tool bar.
- Select File>New... from the Menu bar.

The Create a New Command Channel dialog shown in Figure 311 appears:

Figure 311. Create a New Command Channel Dialog



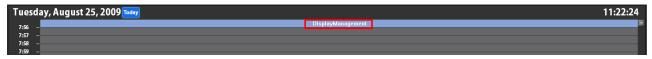
4. Enter the desired name for the new channel.

Note Spaces are not allowed in command channel names.

- **5.** Click the list button $[\nabla]$ on the Product selection drop-down and select the desired product (playout device) from the list. The new command channel will be associated with this playout device only.
- **6.** Click the **0K** button to close the dialog and create the command channel for the selected product.

The new command channel name appears at the top of the Schedule Display Area as shown in Figure 312.

Figure 312. Command Channel Name in Schedule



7. Repeat Step 1 through Step 5 for any additional command channels you wish to create.

NoteWith a command channel created and open, a new command channel can also be created by right-clicking on the channel name in the Schedule Display Area and selecting Create New Command Channel... from the menu or pressing the [N] key on the keyboard.

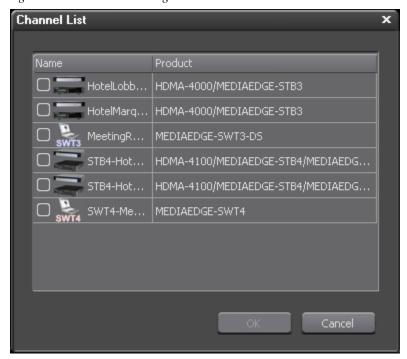
Open a Channel

To open an existing channel in order to add playlists to its schedule, follow these steps:

- **1**. Do one of the following:
- Click the **Open** 🖻 button on the Tool bar.
- Select File>Open... from the Menu bar.

The Channel List dialog shown in Figure 313 appears.

Figure 313. Channel List Dialog

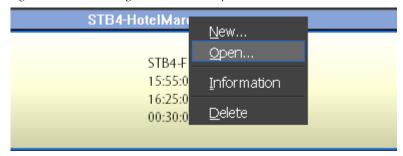


Note If the Schedule Display is in the Command Channel view, the Command Channel List dialog will open to display available Command Channels.

- **2.** Select any channels you wish to open.
- **3.** Click the **OK** button to open the selected channel(s).

Note If at least one channel is already open, additional channels can also be opened by right clicking on the column header of an open channel, selecting Open... from the menu or pressing the [0] key on the keyboard (see Figure 314) and selecting the desired channel(s) to open from the Channel List dialog.

Figure 314. Channel Right Click Menu - Open



Note

A open channel can be closed by right clicking on the channel column header, selecting Open... from the menu or pressing the [**0**] key on the keyboard and removing the check mark next to the desired channel name in the Channel List dialog. Exiting the DCM Console application closes all open channels.

Adjust Channel Column Width

By default, the channel columns have a fixed width which is automatically set based on the number of channels open.

If you want to adjust the width of individual channel columns, do the following:

1. Select View>Channel Width>Variable from the Menu bar (see Figure 315).

💯 DCM Console <u>E</u>dit <u>View G</u>o <u>A</u>ction Option <u>H</u>elp Channel Width Fixed ė Channel Type Valiable **25, 200** Time scale Material Information **\$** Bin Window Layout Display Bin Window on Top Keep Bin Window on Top. Tool bar

Figure 315. Schedule Channel Width Menu

2. Place the cursor on the channel separator in the column header. The cursor changes to a resize cursor as shown in Figure 316.

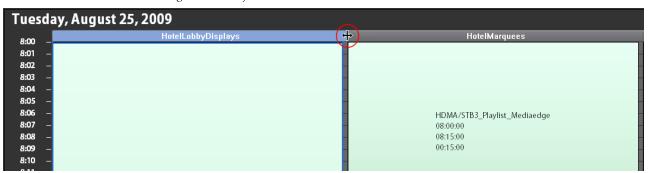


Figure 316. Adjust Channel Column Width

Status bar

3. Drag the cursor to the left or right to decrease or increase the width of the channel column to the left of the cursor.

In the example above, dragging the cursor to the left decreases the width of the HotelLobbyDisplays channel column. Dragging the cursor to the right increases its width. This operation does not change the width of the Hotel-Marquees channel column. If the width of the HotelLobbyDisplays column is increased, the column(s) to the right may be pushed out of the Schedule Display Area. In this case, a horizontal scroll bar will appear at the bottom of the display area.

Select View>Channel Width>Fixed to return all channel columns to a fixed width within the Schedule Display Area without a horizontal scroll bar.

Delete a Channel

If you wish to delete a channel, do the following:

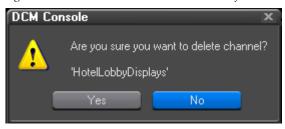
- 1. Right-Click on the Channel name at the top of the channel column.
- **2.** Select Delete from the menu or press the [**D**] key on the keyboard (see Figure 317).

Figure 317. Channel Right Click Menu - Delete



The DCM Console channel delete confirmation dialog shown in Figure 318 appears.

Figure 318. DCM Console Delete Channel Confirmation Dialog



3. Click the Yes button to confirm deletion of the channel.

Note

Deleting a channel from the schedule deletes the channel from the DCM database. It will no longer appear in the Channel List dialog when opening channels.

Update a Channel

Normally, channel updates occur automatically via the update schedule defined for a server or group object in the Target Screen (see *Create a Server Object on page 288* and *Create a Group Object on page 293* for more information). However; if the update is not scheduled to take place for several hours (or days) and you have made changes to one or more channels (e.g. added content to playlists, changed playlist start time, length, etc.) which

need to be updated before the scheduled time, a manual update can be initiated.

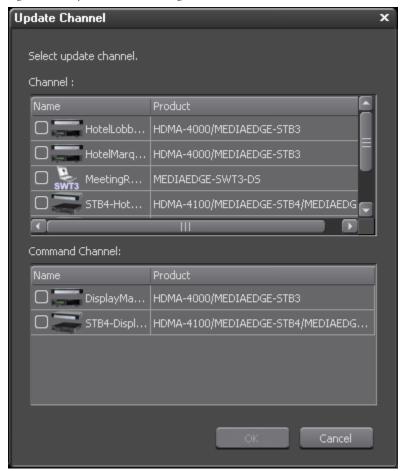
Note Manual updates do not cancel any scheduled automatic channel updates. These will still take place at the scheduled time.

To perform a manual channel update, do the following:

1. Select File>Update... from the Menu bar.

The Update Channel dialog illustrated in Figure 319 appears.

Figure 319. Update Channel Dialog



- 2. Select the playout and command channels which you wish to manually update.
- **3.** Click the **OK** button.
- **4.** The DCM Console update confirmation dialog shown in Figure 320 appears.

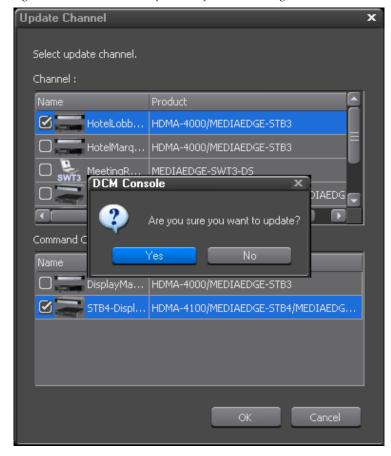
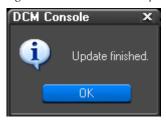


Figure 320. DCM Console Update Confirmation Dialog

5. Click the **Yes** button to confirm the channel update.

When updates are complete, the DCM Console update finished dialog shown in Figure 321 appears.

Figure 321. DCM Console Update Finished Dialog



6. Click the **OK** button to close the dialog.

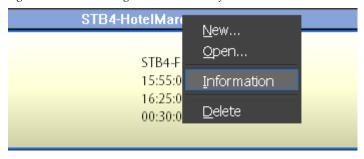
CAUTION If significant changes have been made to a channel, such as adding large content files to a playlist, the manual update must be performed with sufficient time in advance of the schedule playlist start time to allow the content to be uploaded to playout devices. Numerous large files could take some time to upload.

View Channel Information

To view group assignment information for the selected channel do one of the following:

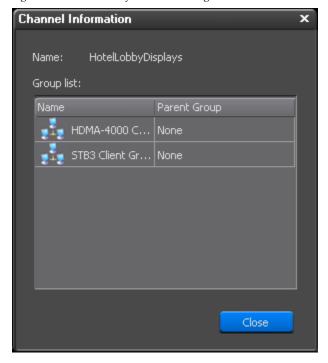
- Select View>Information from the Menu bar.
- Right click on the desired channel column header and select Information from the menu or press the [I] key on the keyboard (see Figure 322).

Figure 322. Channel Right Click Menu - Information



The Channel Information dialog illustrated in Figure 323 appears.

Figure 323. Channel Information Dialog



Click the **Close** button to close the dialog.

Schedule Management

The operations described in this section deal with the management of schedules assigned to playout channels and command channels.

Assign Playlists to Playout Channel

One or more playout channels need to be opened or created before creating a schedule. A schedule may by created for multiple channels simultaneously by opening the desired channels.

After opening or creating all desired channels, playlists are assigned to a channel by following these steps:

- **1.** Do one of the following:
- Click the Show bin window button on the Tool bar.
- Select View>Bin Window from the Menu bar.
- Right click on the Playlist Display Area and select Bin Window from the menu or press the [B] key on the keyboard.

The Playlist Bin Window shown in Figure 324 appears.

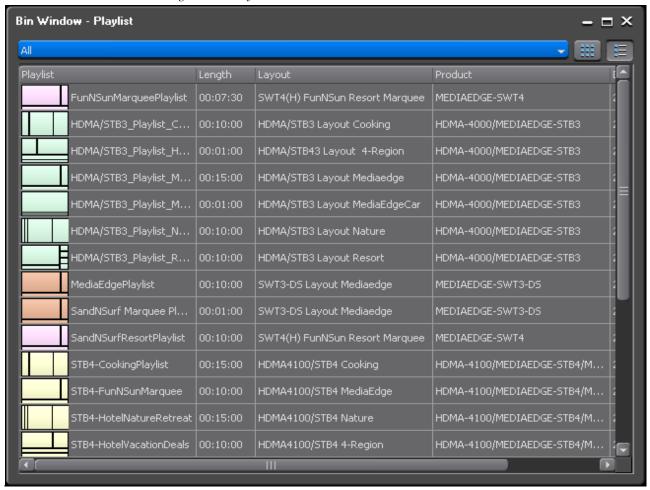


Figure 324. Playlist Bin Window

The view style can be toggled between the details view shown in Figure 324 and the thumbnails view.

- 2. Select the desired playlist view by using the **Thumbnail** button and the **Details** button in the Playlist Bin Window.
- **3**. If you wish to change the playlist category display, click the list button $[\nabla]$ on the playlist category drop-down and select the desired category from the list.

The Playlist Bin Window displays only those playlists assigned to the selected category. See Figure 325.

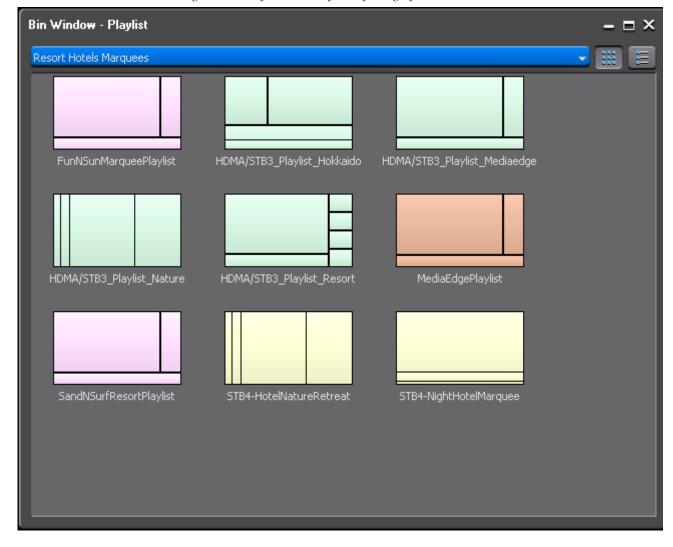


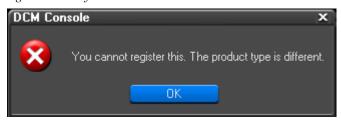
Figure 325. Playlist Bin - Playlists by Category

Note Figure 325 shows the thumbnail view in the Playlist Bin Window.

4. Click and drag the desired playlist from the Playlist Bin Window to the desired start time in the desired channel on the schedule.

Note If you try to place a playlist that is assigned to a product (playout device) other than the one to which the channel is assigned, the error dialog illustrated in Figure 326 appears. For example, if the open channels are for the HDMA-4100/MEDIAEDGE-STB4/MEDIAEDGE-STB4H and MEDIAEDGE-SWT4 products, playlists that are green and orange cannot be added to these channels as they correspond to other products.

Figure 326. Playlist Placement Error



- **5.** When the playlist is positioned at the desired location in the schedule, click the left mouse button to anchor it at that point.
- **6.** Click the Playlist Bin Window task bar item to reopen the window and repeat Step 2 through Step 5 to add additional playlists to the schedule.

NoteIf you do not want the Playlist Bin Window to minimize each time a playlist is assigned to the schedule, you can elect to keep the playlist bin window on top of the schedule until it is closed or to display the bin window on top. See *Bin Window Display Settings on page 263* for more information.

7. When all the desired playlists are assigned to the schedule, click the X in the upper right corner of the Playlist Bin Window to close this window.

When finished assigning playlists to the schedule, it may resemble the example shown in Figure 327.

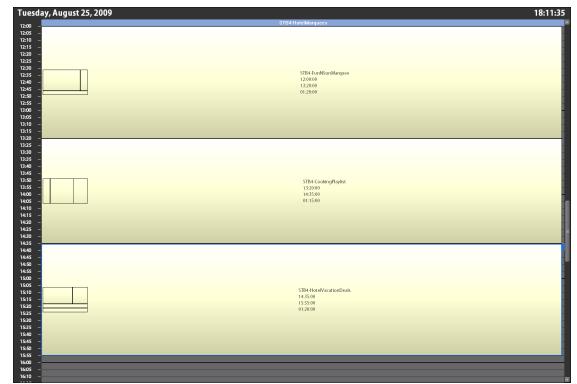


Figure 327. Playlists Added to Schedule

Note This schedule consists of a single channel. Multiple channels can be opened simultaneously when adding playlists to the schedule as illustrated in Figure 328.

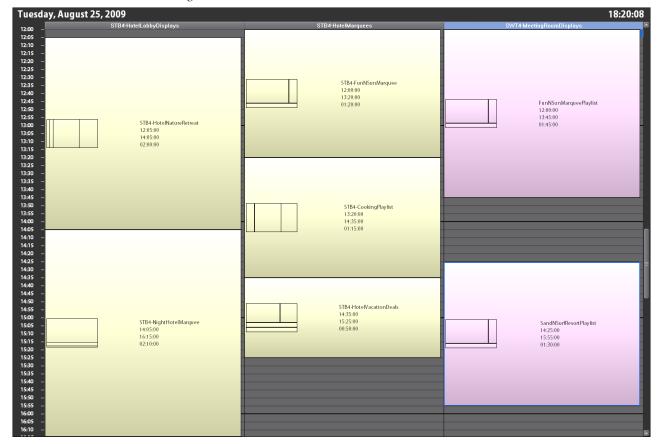


Figure 328. Multi-Channel Schedule

Assign Commands to a Command Channel

One or more command channels need to be opened or created before creating a command schedule. Schedules for multiple command channels may be created simultaneously by opening the desired channels.

After opening or creating all desired command channels, serial commands and volume commands are assigned to a command channel by following these steps:

- **1.** Do one of the following:
- Click the **Show bin window** Button on the Tool bar.
- Select View>Bin Window from the Menu bar.
- Right click on the Playlist Display Area and select Bin Window from the menu or press the [B] key on the keyboard.

The Command Bin Window shown in Figure 329 appears.

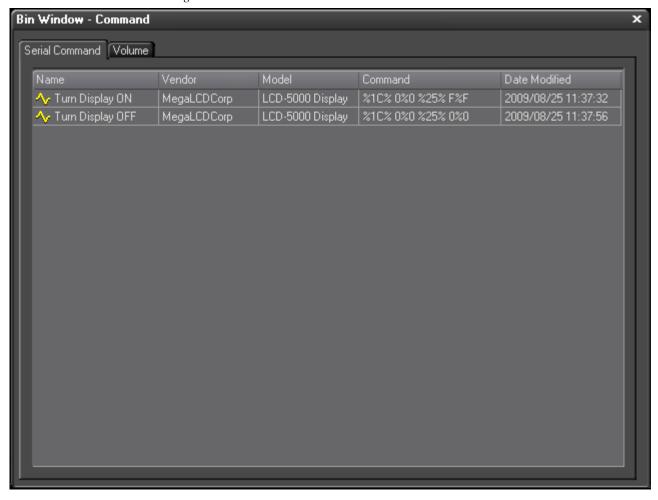


Figure 329. Command Bin Window - Command Tab

2. Select the Volume tab if you wish to assign a volume command to the command channel schedule or the Serial Command tab if you wish to assign a serial command to the command channel.

Figure 330 shows the Volume tab open in the Command Bin Window.

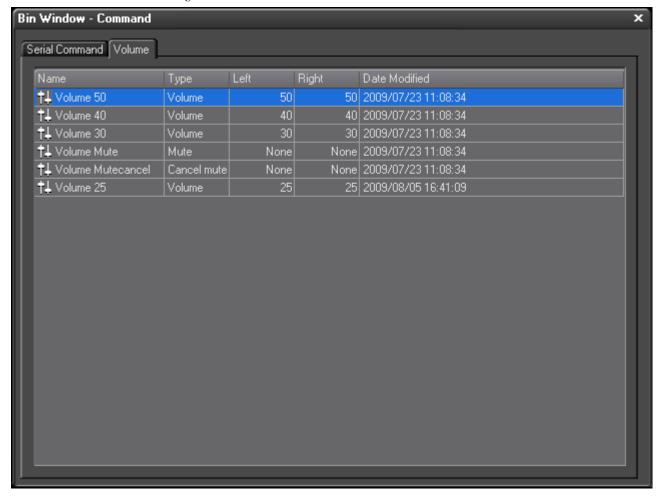


Figure 330. Command Bin - Volume Tab

- **3.** Click and drag the desired serial command or volume command from the Command Bin Window to the desired start time in the desired channel on the schedule.
- **4.** When the command is positioned at the desired location in the schedule, click the left mouse button to anchor it at that point.
- **5.** Click the Command Bin Window task bar item to reopen the window and repeat Step 2 through Step 5 to add additional playlists to the schedule.

Note If you do not want the Command Bin Window to minimize each time a command is assigned to the schedule, you can elect to keep the Command Bin Window on top of the schedule until it is closed or display the bin window on top. See *Bin Window Display Settings on page 263* for more information.

6. When all the desired command are assigned to the schedule, click the X in the upper right corner of the Command Bin Window to close it.

When finished assigning command to the command channel schedule, it may resemble the example shown in Figure 331.

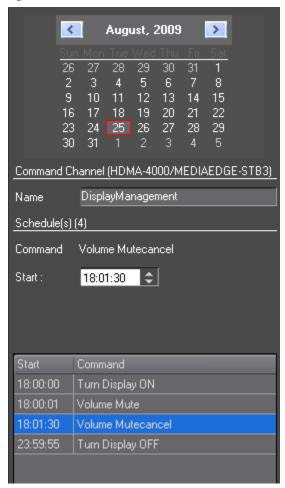
Figure 331. Playlists Added to Schedule



Note A command occupies one (1) second on the timeline. The time scale must be set to 1Sec in order to see the command names in the schedule as illustrated in Figure 331.

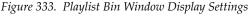
Figure 332 shows what the details area may show after assigning commands to the command channel schedule.

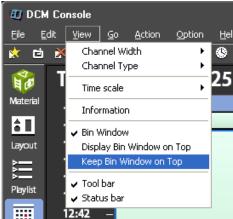
Figure 332. Command Details



Bin Window Display Settings

To change the way in which the Bin Window is displayed when assigning playlists or serial commands and volume settings to a schedule, select the desired display setting from the view menu (see Figure 333) while the Playlist Bin Window is open.





The choices are:

Display Bin Window on Top

When the Bin Window is minimized and not visible, selecting this option displays the Bin Window on top of the schedule but does not keep it on top.

Keep Bin Window on Top

This selection keeps the Bin Window on top of the schedule while positioning playlists in the schedule. The Bin Window may be moved if it is in the way. When clicking on the schedule to position a playlist, the Bin Window appears transparent as illustrated in Figure 334.

Pressing the [CTRL]+[T] keys on the keyboard also sets the Bin Window display settings to Keep Bin Window on Top.

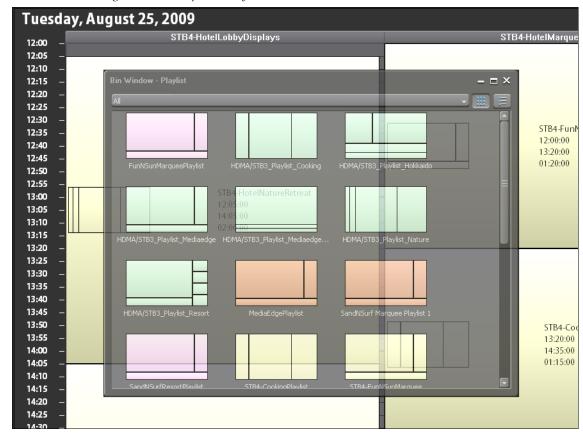


Figure 334. Transparent Playlist Bin Window

Edit a Channel Schedule

After assigning playlists to channel, it may be necessary to adjust the length of one or more playlists. It may be desirable to have some playlists play repeatedly until the end of the schedule is reached or to play a playlist, for example, three times before moving to the next playlist in the schedule. You may wish to delete a playlist or assign additional playlists to the schedule.

Adjust Playlist Start Time and Length

To increase or decrease the length of a playlist in the schedule, do the following:

1. In the Schedule Display Area, click on the channel playlist for which you wish to adjust start time or length.

All of the playlists that have been assigned to a channel appear in the Playlists Detail Area as illustrated in Figure 335.

Channel (HDMA-4000/MEDIAEDGE-STB3) HotelMarquees Name Schedule(s) (4) HDMA/STB3_Playlist_Nature Playlist: Start: 08:25:00 Length: 00:10:00 for number of times Repeat: Length Playlist 08:00:00 00:15:00 HDMA/STB3_Playlist_Media 08:15:00 00:10:00 HDMA/STB3_Playlist_Resort 08:25:00 00:10:00 HDMA/STB3_Playlist_Nature 00:10:00 HDMA/STB3_Playlist_Resort 12:37:00

Figure 335. Selected Channel Playlists

The current start time (24-hour clock) and length in Hours:Minutes:Seconds (HH:MM:SS) of each playlist is listed in the Start and Length columns.

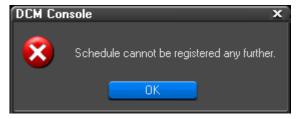
2. In the Start: field of the Playlist Details area, enter the desired start time for the playlist or use the Up/Down arrow keys to increase or decrease the start time.

Note Clock times are in a 24-hour format in which 1:00pm is 13:00, 2:00pm is 14:00, etc.

3. Press the [ENTER] key to set the new length for the selected playlist.

Note If the start time specified causes an overlap with the prior playlist, the error dialog illustrated in Figure 336 appears. The specified start time can not be earlier than the end time of the prior playlist.

Figure 336. Start Time Error Dialog



4. In the Length: field of the Playlist Details Area, enter the desired length for the playlist or use the Up/Down arrow keys to increase or decrease the length.

5. Press the [ENTER] key to set the new length for the selected playlist.

As shown in Figure 337, the start time of the selected playlist was changed from 08:25:00 to 08:30:00 and its length was changed to 20 minutes (00:20:00) from its original 10 minutes (00:10:00).

Channel (HDMA-4000/MEDIAEDGE-STB3) 8:26 8:27 8:28 8:39 8:31 8:32 8:33 8:34 8:35 8:36 8:37 8:38 8:39 8:40 8:41 8:42 8:43 8:44 8:45 8:46 8:47 8:48 Name HotelMarquees Schedule(s) (4) HDMA/STB3_Playlist_Nature Playlist: Start : 08:30:00 00:20:00 💠 Length: for number of times Repeat: HDMA/STB3 Playlist Resort HDMA/STB3_Playlist_Med. 00:10:00 HDMA/STB3_Playlist_Res 00:20:00 HDMA/STB3_Playlist_Nat 12:37:00 | 00:10:00 | HDMA/STB3_Playlist_Res

Figure 337. Playlist Start and Length Adjusted

CAUTION Start time and length adjustments may leave gaps between playlists. These gaps will result in a black display in the channel for the length of the gap. If this is not desired, adjust start time and length of adjacent playlists to eliminate the gap.

Alternative Methods

• To change the start time, playlist objects can be dragged and dropped to a new location in the channel.

Note If a playlist object is dropped in a location that overlaps another playlist, it will automatically be repositioned at the end of the overlapped playlist.

• To change a playlist length, the top or bottom border of the selected playlist can be dragged to increase or decrease the length.

Note If a playlist border is dragged to a position that overlaps another playlist, the border returns to the original location and no change in playlist length is made.

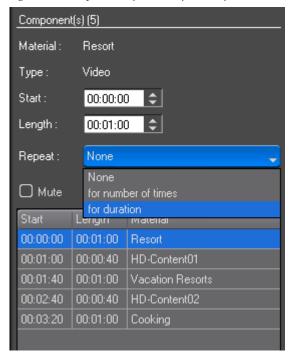
Repeat a Playlist

Rather than adding a number of unique playlists to a playout channel schedule, it may often be desirable to repeat a playlist a certain number of times or repeat as many times as possible until the end of the daily schedule is reached.

To repeat a playlist in the channel schedule, do the following:

- 1. Click on the playlist for which you wish to assign a repeat value.
- **2.** In the Playlist Details Area, click the list button $[\nabla]$ on the Repeat dropdown to see the list of choices for that value (see Figure 338).

Figure 338. Playlist Component Repeat Drop-Down List



3. Select the desired repeat value from the list as explained below:

None

Default repeat value assigned to all playlists when they are added to the channel schedule. The playlist will play once and then the next playlist on the schedule is played.

For number of times and for duration settings determine the manner in which the dragged lower border on the playlist object behaves as illustrated in Figure 339.

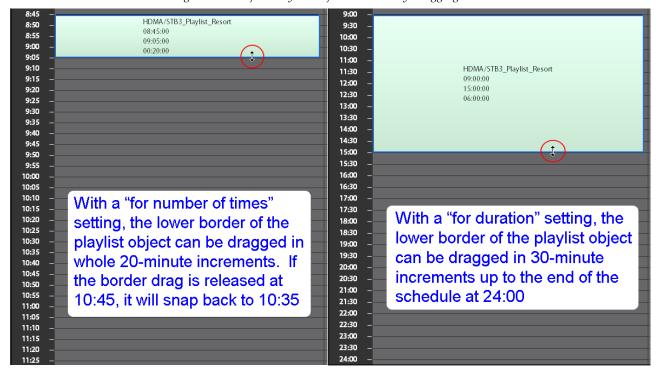


Figure 339. Adjust Playlist Object End Time by Dragging.

Note

The 20-minute increment in the "for number of times" setting above is a function of the original 20-minute length of the playlist. The playlist is repeated in its entirety as many times as possible.

Note

The 30-minute increment in the "for duration" example above is a function of the time scale setting of 30M. If the time scale increment is 5M, the length of the playlist can be increased in five-minute increments.

For number of times

Playlist will repeat in its entirety as many times as possible based on where your drag the lower border.

For example, if a playlist is 15-minutes in length and you drag the bottom border of the playlist 48 minutes beyond its current ending position, the end time will snap back to 45 minutes beyond the current end time since that is the closest full 15-minute increment.

If the playlist length is reduced by dragging, the playlist end time will also snap to the nearest full 15-minute increment.

For duration

Play the playlist until the end of the one-day schedule or wherever the end point is set based on dragging the playlist lower object border.

Note

The exact end time is based on the time scale increment. The end time border snaps to the nearest increment (up to the end of the one-day schedule) when the mouse button is released.

Cut, Copy and Paste Playlists and Commands

When building a schedule, it is often desirable to copy an existing playlist or command to another location in the schedule, or to remove a playlist or command from its current location and place it elsewhere in the schedule. The Cut, Copy and Paste operations allow you to do this.

To cut or copy an existing playlist or command and paste it in another location in the schedule, do the following:

- 1. Select the playlist or command to be copied.
- **2.** Do one of the following:
- Click the Copy or Cut button on the Tool bar.
- Select Edit>Copy or Edit>Cut from the Menu bar.
- Press the [CTRL]+ [C] (Copy) or the [CTRL]+ [X] (Cut) keys on the keyboard.
- Right click on the playlist and select Cut or Copy from the menu or press the [T] (Cut) or [C] (Copy) key on the keyboard.
- **3.** Click on the schedule at the position where you wish to place the copied or cut object.
- **4.** To paste the copied or cut object, do one of the following:
- Click the **Paste** button on the Tool bar.
- Select Edit>Paste from the Menu bar.
- Press the [CTRL]+ [V] keys on the keyboard.
- Right click on the schedule and select Paste from the menu or press the [P] key on the keyboard.

If there is not sufficient time left in the schedule to accommodate the playlist the selected channel, it will be truncated to fit.

Note After copying a playlist or command object, multiple copies may be pasted on the schedule using one of the above paste methods.

Delete a Playlist or Command

To delete a playlist or command from a channel schedule, select the playlist or command to be deleted and follow these steps:

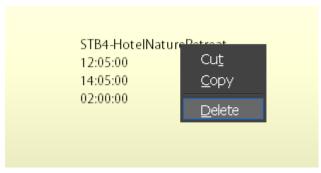
Do one of the following:

- Click the Delete button on the Tool bar.
- Select Edit>Delete>Schedule from the Menu bar.

Note This option is not available for commands in a Command Channel.

- Press the [**DEL**] key on the keyboard.
- Right click on the playlist and select Delete from the menu or press the [D] key on the keyboard (see Figure 340).

Figure 340. Playlist Right Click Menu - Delete



Note There is no confirmation prompt for deleting a playlist or command from the schedule.

Undo a Component Operation

If you perform an operation such as deleting a playlist, pasting a copy of a playlist, cutting a playlist, etc. in error, it is possible to undo these operations.

To undo an operation, do one of the following:

- Select Edit>Undo from the Menu bar.
- Press the [CTRL]+[Z] keys on the keyboard.

Operations are undone in reverse order with the most recent operation being reversed first. There are 10 levels of undo.

Copy a Schedule

Channel schedules are created for a single 24-hour period. They do not span multiple days; however, an existing daily channel schedule can be copied to other dates if it is desirable to repeat the same schedule for those dates. A schedule may be copied to up to 30 days.

To copy the daily schedule for a playout or command channel to other calendar dates, do the following:

- 1. From the Schedule Display Window on the date you wish to copy, select the desired channel.
- **2.** Select Action>Copy 1 day's Schedule... from the Menu bar.

The Copy Schedule dialog illustrated in Figure 341 appears.

Figure 341. Copy Schedule Dialog



The selected channel name appears in the title of this dialog.

- **3.** If you wish to copy the schedule for all channels from a particular date, select the All Channels option.
- **4.** Use one of the methods indicated in the dialog to selected the dates to which you wish to copy the current day's schedule.
- Click on the first day and drag the mouse pointer to the last day to which you wish to copy the schedule.
- Click on the first day and then hold sown the [SHIFT] key and click on the last day to which you wish to copy the schedule.

Figure 342 shows dates selected (August 27 to September 4) to which to copy the schedule.

Note In Figure 342, All Channels is selected which will copy the schedules for all channels on the displayed schedule to the selected dates.

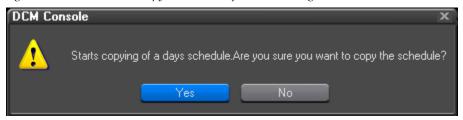
Copy 1 day's schedule(HotelMarquees) × The date range for the copy destination can be selected using the following < August, 2009 > mouse operations. (Maximum 30 days) 8 - Click while pressing the Shift key 12 13 14 16 17 18 19 20 21 22 Please note that schedules that overlap 23 24 25 26 by two days cannot be copied. Schedule(s) of the copy destination will be deleted. All Channels Cancel

Figure 342. Schedule Copy Destination Dates Selected

5. Click the **0K** button.

The DCM Console copy confirmation dialog shown in Figure 343 appears

Figure 343. DCM Console Copy Schedule Confirmation Dialog



6. Click the **Yes** button to copy the currently displayed schedule to the selected date(s).

WARNING Any schedules that exist for the selected copy destination date(s) will be overwritten with the copied schedule. The prior schedule for that date can not be recovered.

As illustrated in Figure 344, the displayed schedule is copied to the selected dates.

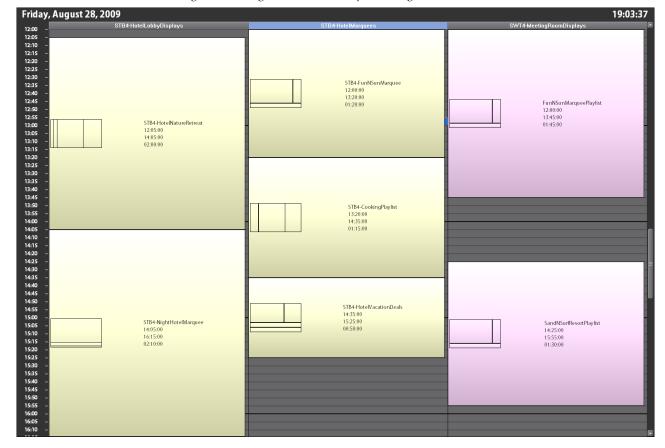


Figure 344. August 25 Schedule Copied to August 278

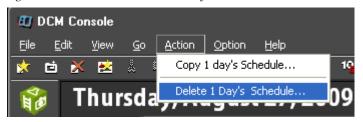
Delete a Schedule

Channel schedules are created for a single 24-hour period. They do not span multiple days; however, an existing daily channel schedule may be deleted for any date range on the calendar.

To delete the daily schedule for a playout or command channel for specific calendar dates, do the following:

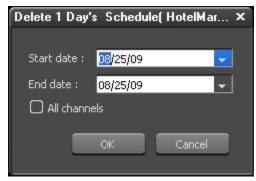
- 1. In the Schedule Display Area, select the channel for which you wish to delete a schedule.
- **2.** Select Action>Delete 1 day's Schedule... from the Menu bar (see Figure 345).

Figure 345. Action Menu - Delete 1 Day's Schedule



The Delete 1 Day's Schedule dialog illustrated in Figure 346 appears. The name of the selected channel appears in the dialog title.

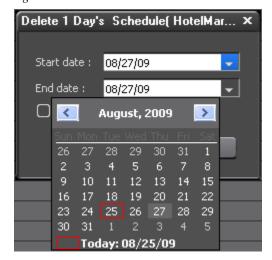
Figure 346. Delete 1 Day's Schedule Dialog



- **3.** If you wish to delete all channel schedules for the selected date, select the All channels option.
- **4.** Select the date range by specifying the Start and End dates for which you wish to delete the daily schedule for the selected channel(s).

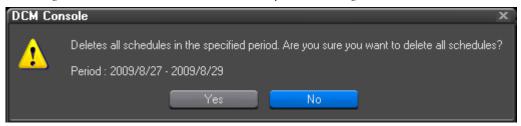
Note As shown in Figure 347, clicking the $[\nabla]$ button displays a calendar from which the desired dates may be selected.

Figure 347. Select Schedule Delete Dates



The DCM Console delete schedule confirmation dialog shown in Figure 348 appears.

Figure 348. DCM Console Delete Schedule Confirmation Dialog



5. Click the **Yes** button to confirm deletion of the selected schedule(s) for the selected date range.

Export a Schedule

Schedule information can be exported from the DCM and copied directly to the HDMA-4000/HDMA-4100 playout device.

To export a schedule from the DCM, do the following:

- **1.** Select File>Export Schedule... from the Menu bar.
- **2.** The Export Schedule dialog illustrated in Figure 349 appears.

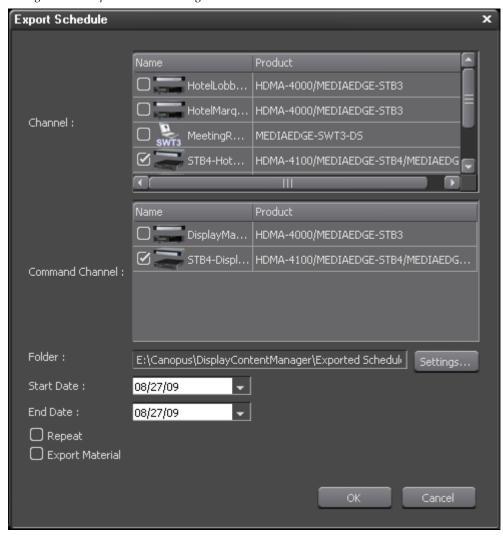


Figure 349. Export Schedule Dialog

Both Playout Channels and Command Channels are listed in the dialog. Those channels which are currently open and selected in the appropriate Channel Type view have a check mark by their name.

3. If you wish to export a playout or command channel other than the one selected, select the desired channel.

Note A maximum of one playout and one command channel may be selected simultaneously. If multiple playout or command channels exist, selecting one will deselect any other playout or command channel that may have been selected.

4. Click the **Settings** button and browse to the desired folder in which to save the exported schedule. See Figure 350 for an example.



Figure 350. Browse for Folder Dialog

Note If you wish to create a new folder for the exported schedule, click the **Make**New Folder button and create the desired folder.

5. Select the Repeat option if you wish to repeat the schedule for the selected Start Date on all subsequent days.

The selected daily schedule will be repeated each day until the schedule is updated.

Note End Date selection is disabled when the Repeat option is selected as the End Date s not used.

- **6.** Select the desired start and end date by clicking the $[\nabla]$ button and selecting the desired dates from the calendar (see Figure 351).
- **7.** Select the Export Material option if you wish to also export the material associated with the playlists on the selected channels.

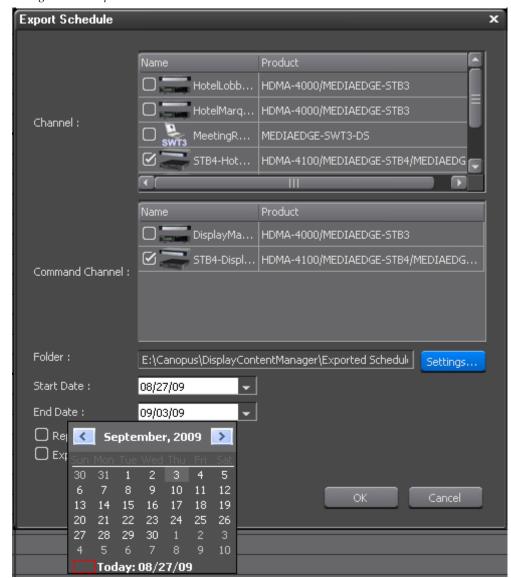
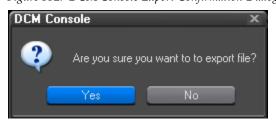


Figure 351. Export Dates Calendar

8. Click the **0K** button.

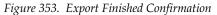
The DCM Console export confirmation dialog shown in Figure 352 appears.

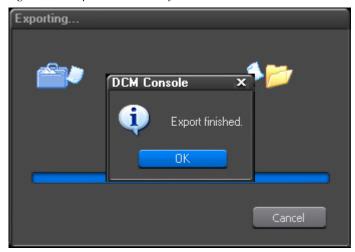
Figure 352. DCM Console Export Confirmation Dialog



9. Click the **Yes** button to begin the export of the selected channels schedules and, if applicable, associated material.

When the schedule has been exported, the confirmation dialog illustrated in appears.

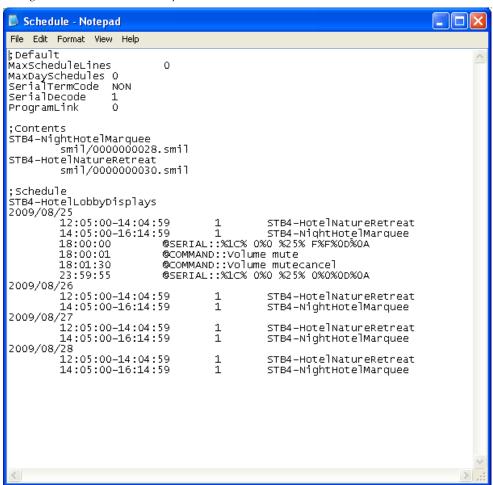




10. Click the **OK** button to close the dialog.

 \boldsymbol{A} .txt file named schedule.txt (see Figure 354 for an example) is created in the specified folder location.

Figure 354. Schedule.txt Example



If the Export Material Option was selected, folders containing the exported material are also created in the designated export location.

Copy Exported Schedule and Material

Exported schedules and material may be copied directly to an HDMA-4000 or HDMA-4100 for playout.

See the appropriate playout device manual for the location and settings for copying schedules and material exported from the DCM.

Exported content may be copied to the HDMA-4000/HDMA-4100 playlist folder (this folder must first be shared) or directly to a USB drive. Both playout devices are capable of playing content directly from a USB drive.

Target Screen

The Target screen is where devices are defined to which schedules and content will be distributed for playout.

When the **Target** button is selected from the Navigation bar, or, one of the methods explained in *Alternative Function Screen Access Methods on page 92* is used, the Target Screen with its associated display areas and function bars appears as illustrated in Figure 355. These elements are used to define servers, playout device groups, and playout device clients in the MediaEdge system to which material, layouts, playlists and schedules are uploaded for playout.

The devices to be updated are update targets.

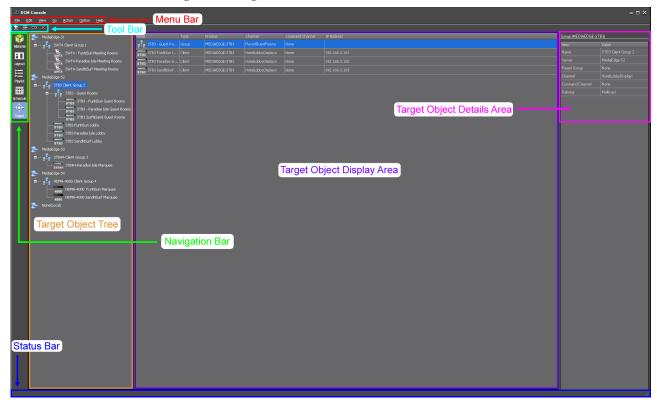


Figure 355. Target Screen

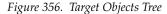
Note

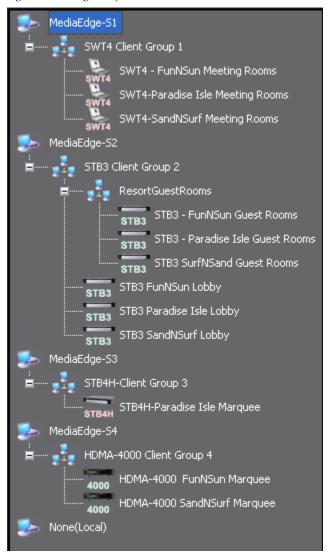
Figure 355 depicts the Target Display Area with servers, groups and clients added and a group selected. The Target Object Display Area will be blank when it is first accessed.

Target Object Details

The physical components that comprise the MediaEdge system are defined in the Target screen. The information that appears in the Target Object Display Area and the Target Object Details Area depends upon the type of target object that is selected in the Target Object Tree.

Figure 356 illustrates a sample Target Object Tree fully expanded to show all defined objects.





Click the "-" to collapse a portion of the tree that is expanded. Click the "+" to expand a portion of the tree that is collapsed.

The Target Object Tree is organized with server objects at the top level, group objects on the next level(s) and client objects at the lowest levels. The object icons are illustrated in Table 7.

Table 7. Target Object Types

Icon	Target Object Type
	Server
2-2	Group
4000	HDMA-4000 Client
4100	HDMA-4100 Client
STB3	STB3 Client
STB4	STB4 Client
STB4H	STB4H Client
SWT3	SWT3-DS Client
SWT4	SWT4 Client

The sections which follow describe the details displayed in the Target Object Display Area and Target Object Details Area when server, group and client objects are selected in the Target Object Tree.

Target Object Display Area

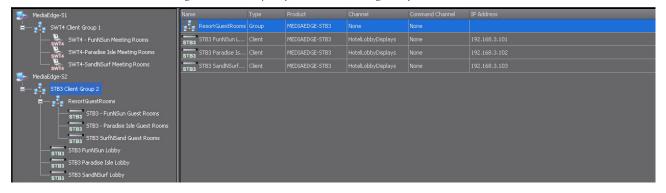
When an object is selected in the Target Object Tree, all objects associated with the selected object are displayed in the Target Object Display Area. For example, if a server object is selected, all groups associated with that server are displayed (see Figure 357).

Figure 357. Server Object Selected in Target Object Tree



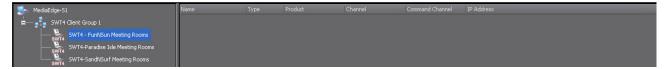
If a group object is selected, all subgroups and clients associated with that group are displayed (see Figure 358).

Figure 358. Group Object Selected in Target Object Tree



If a client object is selected, nothing is displayed in the Target Object Display Area as nothing is associated with a client (see Figure 359).

Figure 359. Client Object Selected in Target Object Tree



Regardless of the selected object type, the following information is displayed in the Target Object Display Area:

Note

Information in the Target Object Display Area is display only and cannot be changed in this view. To change the details displayed in the display area, select the desired object in the Target Object Tree and edit the details in the Target Object Details Area.

Object Name

The name of the object assigned when the object is created.

Type

The object type (server, group client).

Product

The product (playout device) type associated with the object.

Channel

The playout channel (if any) assigned to the object.

Note A Parent Group and its child groups may have different playout channel assignments.

Command Channel

The command channel (if any) assigned to the object.

Note Groups may or may not have an assigned command channel depending on system configuration.

IP Address

The IP address assigned to the object.

Note Groups do not have an IP address as they do not represent a physical piece of equipment in the MediaEdge system.

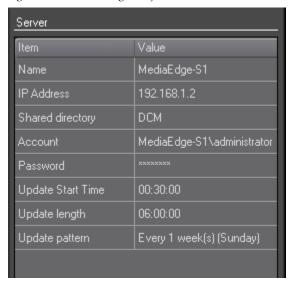
Target Object Details Area

The Target Object Details Area displays the details associated with the target object selected in the Target Object Tree or the Target Object Display area.

Server Object Details

A MediaEdge server is any computer in a MediaEdge system on which the MediaEdge SVS3 or SVS4 server software has been installed. Figure 360 shows the details in the Target Object Details Area when a server object is selected. This information is entered when a server object is created (see *Create a Server Object on page 288*). This information can be edited at any time (see *Edit a Server Object on page 291*).

Figure 360. Server Target Object Details



Name

The server object name.

IP Address

The IP address assigned to the server.

Shared Directory

The alias assigned to the shared content directory when the MediaEdge server was installed.

Account

A Windows user account used to access the server.

Password

The password associated with the Windows user account.

Update Start Time

The time of day at which content, playlist and schedule updates will take place on the scheduled day(s).

Update Length

The estimated length of the update period.

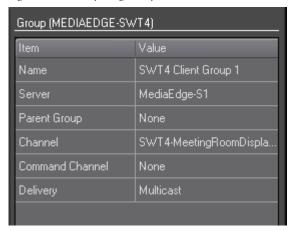
Update Pattern

The scheduled update interval for the server.

Group Object Details

A group is a user-defined container for MediaEdge clients and provides a way of organizing clients based on similar attributes. Figure 361 shows the details in the Target Object Details Area when a group object is selected. This information is entered when a group object is created (see *Create a Group Object on page 293*). This information can be edited at any time (see *Edit a Group Object on page 299*).

Figure 361. Group Target Object Details



Name

The name assigned to the group.

Server

The Server object with which the group is associated.

Parent Group

The parent group (if any) to which the group belongs.

Channel

The playout channel assigned to the group and its associated clients.

Command Channel

The command channel (if any) assigned to the group and its associated clients.

Delivery

The selected method of delivering content to playout devices.

Client Object Details

A client is a specific playout device in the MediaEdge system. Figure 362 shows the details in the Target Object Details Area when a client object is selected. This information is entered when a client object is created (see *Create a Client Object on page 301*). This information can be edited at any time (see *Edit a Client Object on page 303*).

Figure 362. Client Target Object Details



Name

The name assigned to the client device.

Group

The group to which the client device is assigned.

Note

Playout and command channel assignments are inherited from the associated group object.

IP Address

The IP address assigned to the client device.

Create a Server Object

All MediaEdge servers must be defined before client groups and client playout devices can be added. If your MediaEdge system does not have any MediaEdge servers, you can begin by defining client groups for the None (Local) server object.

To define a MediaEdge server, follow these steps:

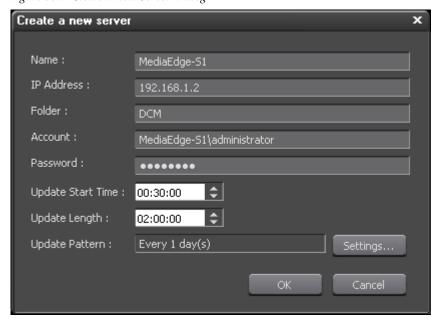
- **1.** Do one of the following:
- Click the New server button on the Tool bar.
- Select File>New... >Server... from the Menu bar.
- Right-Click on an existing target object in the Target Object Tree and select New>Server... from the menu or press the [S] key on the keyboard (see Figure 363).

Figure 363. Right-Click New Object Menu



The Create a New Server dialog shown in Figure 364 appears:

Figure 364. Create a New Server Dialog



- 2. Enter the desired name for the new server.
- **3.** Enter the IP address assigned to the server.

Note There is no lookup or validation of IP addresses in the MediaEdge system. You must verify the correct IP address for each server and client in the system.

- **4.** Enter the folder alias assigned to the shared content/FTP directory at the time the MediaEdge server was installed. See *FTP Server Setup on page 41* for more information.
- **5**. Enter the account name and password on the server that has access to the shared content/FTP folder.

Note Enter the account name as either [computer name]\[user name] or [domain name]\[user name].

Note The account name password cannot be blank. A password for the specified account must exist or no connection will be established.

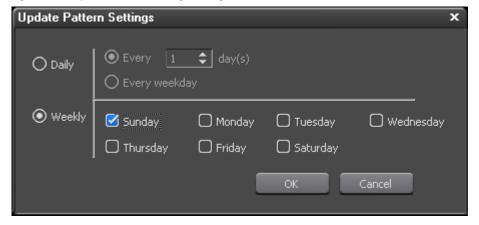
- **6.** Specify the desired start time (24-hour clock) at which scheduled content, playlist and schedule updates will occur on this server.
- **7.** Specify the estimated length (duration) of the updates.

Note The specified Update Length does not guarantee that updates will finish within this time or that they will last for this length of time. File transfers will execute more slowly if a longer time is specified.

8. Click the **Settings**... button to select the desired update frequency.

The Update Pattern Settings dialog shown in Figure 365 appears.

Figure 365. Update Pattern Settings Dialog



The Daily setting allows selection of a daily interval (e.g. every 2 days, every 4 days, etc.) or an update every weekday (Monday through Friday) which will take place at the time scheduled in Step 6.

The Weekly update settings allows the selection of the day each week on which the update will take place at the time scheduled in Step 6.

- **9.** Click the **OK** button to close the Update Pattern Settings dialog.
- **10**. Click the **OK** button on the Create a new server dialog to close the dialog and create the server object.

11. Repeat Step 1 through Step 10 for any additional servers you wish to create.

Edit a Server Object

All of the details of a server object may be set to a value other than the original value.

To change the values associated with a server object, click on the value(s) you wish to change in the Target Object Details Area and enter the desired value as explained below:

Name

Click in the name field and enter the desired server name (see Figure 366).

Figure 366. Server Name Entry



IP Address

Click in the IP Address field and enter the desired IP address (see Figure 367).

Figure 367. Server IP Address Entry



Note

Changing the IP address entry in this field does not change the IP address for the device. The IP address for the server object should only be changed here to reflect any changes that may have been made in the MediaEdge System networking infrastructure.

Shared Directory

Click in the Shared Directory field and enter the desired shared directory alias (see Figure 368).

Figure 368. Server Shared Directory Entry



Note

The shared directory alias was specified when the MediaEdge server was installed. Unless the directory has been renamed and a new alias specified, there is no reason to change the shared directory alias.

Account

Click in the Account field and enter the desired Windows user name used to access the server (see Figure 369).

Figure 369. Server Account Name Entry



Note The specified user name must have full administrative rights on the server.

Password

Click in the Password field and enter the password associated with the account specified for server access (see Figure 370).

Figure 370. Server Password Entry



Update Start Time

Update Start Time is a numeric value and is adjusted by clicking the Update Start Time field and entering the desired time by using the keyboard or the arrows to increment or decrement the selected value (see Figure 371). Update Start Time is expressed in hours:minutes:seconds (HH:MM:SS) on a 24-hour clock.

Figure 371. Server Update Start Time Entry



Update Length

Update Length is a numeric value and is adjusted by clicking the Update Length field and entering the desired time by using the keyboard or the arrows to increment or decrement the selected value (see Figure 372). Update Length is expressed in hours:minutes:seconds (HH:MM:SS).

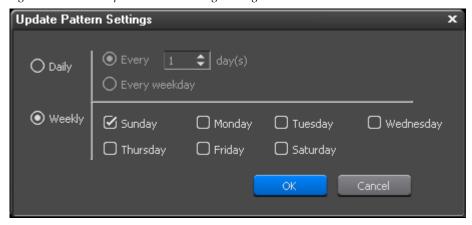
Figure 372. Server Update Length Entry



Update Pattern

The update pattern is changed by clicking in the Update pattern field. The Update Pattern Settings dialog illustrated in Figure 373 appears.

Figure 373. Server Update Pattern Settings Dialog



Select the desired server update pattern and click the **OK** button.

The selected update pattern appears in the Update Pattern Setting field as shown in Figure 374.

Figure 374. Server Update Pattern Settings



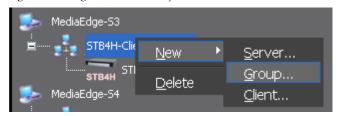
Create a Group Object

A group is a target to which channel schedules are delivered. There is a direct relationship between channels and groups. At least one group must be created for each channel; however, there can be more groups than channels.

To create a group, follow these steps:

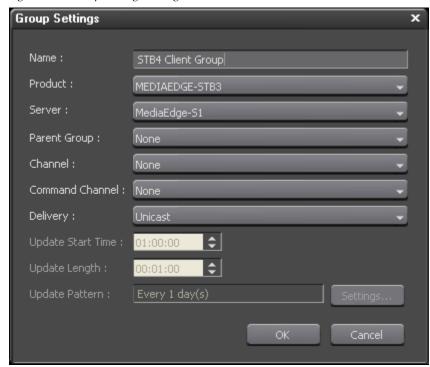
- **1**. Do one of the following:
- Click the New group button on the Tool bar.
- Select File>New... >Group... from the Menu bar.
- Right-Click on an existing target object in the Target Object Tree and select New>Group... from the menu or press the [G] key on the keyboard (see Figure 375).

Figure 375. Right-Click New Object Menu



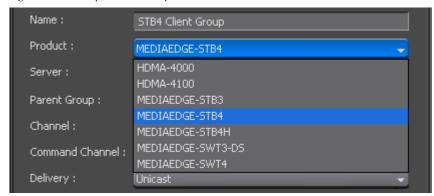
The Group Settings dialog shown in Figure 376 appears:

Figure 376. Group Settings Dialog



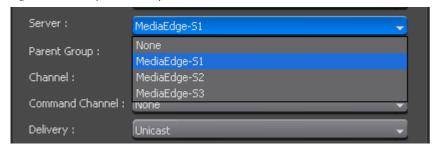
- **2.** Enter the desired name for the new group.
- **3**. Click the list button $[\nabla]$ on the Product selection drop-down and select the desired product (playout device) from the list. The new group will be associated with this type of playout device only. See Figure 377.

Figure 377. Group Product Drop-Down List



4. Click the list button $[\nabla]$ on the Server selection drop-down and select from the list the server with which the group will be associated. See Figure 378.

Figure 378. Group Server Drop-Down List



In the next step, the parent group is selected. Groups can be nested within other groups, if desired, allowing for the grouping of similar clients under a common parent group. A parent group is not required and a group may simply be associated with a server rather than a parent group.

A parent group may simply be a container for other groups without any channel associations.

Any child group created under an existing parent group will automatically be associated with the same product type as its parent; however, playout or command channels associations may be different for the parent and child groups.

Note When creating the first group(s) for each product/channel, the only available selection will be "None."

5. Click the list button $[\nabla]$ on the Parent Group selection drop-down and select from the list the Parent Group with which the group will be associated. If the group being created will not be associated with a Parent group, select "None" from the list. See Figure 379.

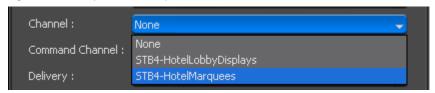
Figure 379. Group Parent Group Drop-Down List



6. If you wish to associate a playout channel with this group, click the list button $[\nabla]$ on the Channel selection drop-down and select from the list the playout channel associated with this group. See Figure 380.

Note Only the channels associated with the selected product type will be displayed.

Figure 380. Group Channel Drop-Down List



7. If you wish to associate a command channel with this group, click the list button $[\nabla]$ on the Command Channel selection drop-down and select from the list the command channel associated with this group. See Figure 381.

Note Only the command channels associated with the selected product type will be displayed.

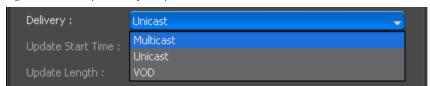
Figure 381. Group Command Channel Drop-Down List



8. Click the list button $[\nabla]$ on the Delivery selection drop-down and select from the list the desired delivery method this group (see Figure 382).

Available delivery methods are explained below:

Figure 382. Group Delivery Drop-Down List



Video on Demand (VOD)

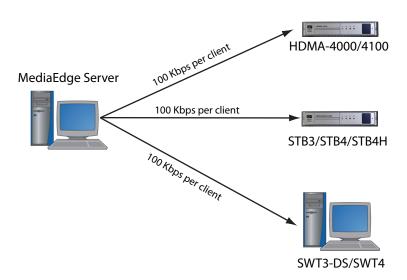
Content is downloaded on request in real time to the client (set-top box or computer) requesting the content. VOD client users may select video clips stored on the server for viewing, either from a dynamically updating menu, or through direct channel number selection via the remote control. The user can pause, stop and resume viewing content at any time. Content chapter points can be created for faster navigation, and clients can fast-forward or rewind video clips during playback.

Unicast

Unicast is a one-to-one connection between the client and the server as illustrated in Figure 383. Unicast uses IP delivery methods such as Transmission Control Protocol (TCP) and User Datagram Protocol (UDP), which are session-based protocols. When one or more clients connect using unicast to a MediaEdge server, the client has a direct relationship to the server. Each unicast client that connects to the server takes up additional bandwidth. For example, if you have 10 clients all playing 100-kilobits per second (Kbps) streams, those clients as a group are taking up 1,000 Kbps. If you have only one client playing the 100 Kbps stream, only 100 Kbps is being used.

Figure 383. Unicast Delivery

Unicast Delivery

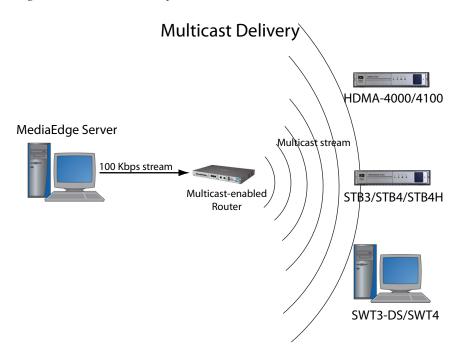


Multicast

Multicast is a true broadcast. The multicast source relies on multicastenabled routers to forward the packets to all client subnets that have clients listening. As illustrated in Figure 384, there is no direct relationship between the clients and a MediaEdge server. The MediaEdge server generates a multicast file when the multicast session is first created. This file contains information that the client(s) need to listen for the multicast. This is similar to tuning into a station on a radio. Each client that listens to the multicast adds no additional overhead on the server. In fact, the server sends out only one stream per multicast station. The same load is experienced on the server whether only one client or 1,000 clients are listening.

Multicast in large MediaEdge systems where all routers are multicastenabled can save quite a bit of bandwidth over unicast.

Figure 384. Multicast Delivery



If the group was assigned to a MediaEdge server other than None(Local), proceed to Step 13. Groups assigned to other servers inherit the update schedule of the server and the Update Start Time, Update Length and Update Pattern fields will be grayed out and inaccessible.

If the group was assigned to the None(Local) server object, proceed with Step 9.

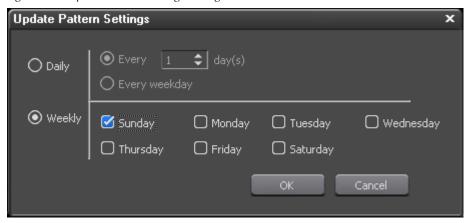
- **9.** Specify the desired start time (24-hour clock) at which scheduled content, playlist and schedule updates will occur for this group.
- **10.** Specify the estimated length (duration) of the updates.

Note The specified Update Length does not guarantee that updates will finish within this time or that they will last for this length of time. File transfers will execute more slowly if a longer time is specified.

11. Click the **Settings**... button to select the desired update frequency.

The Update Pattern Settings dialog shown in Figure 385 appears.

Figure 385. Update Pattern Settings Dialog



The Daily setting allows selection of a daily interval (e.g. every 2 days, every 4 days, etc.) or an update every weekday (Monday through Friday) which will take place at the time scheduled in Step 6.

The Weekly update settings allows the selection of the day each week on which the update will take place at the time scheduled in Step 6.

- **12**. Click the **OK** button to close the Update Pattern Settings dialog.
- **13.** Click the **OK** button on the Create a New Group dialog to close the dialog and create the group object.
- **14.** Repeat Step 1 through Step 13 for any additional groups you wish to create.

Edit a Group Object

All of the details of a group object may be set to a value other than the original value.

To change the values associated with a group object, click on the value(s) you wish to change in the Target Object Details Area and enter the desired value as explained below:

Name

Click in the name field and enter the desired group name (see Figure 386).

Figure 386. Group Name Entry



Server

Click in the Server field and then click the list button $[\nabla]$ that appears in the field to see the list of defined MediaEdge servers. Select the desired server association from the list of choices (see Figure 387).

Figure 387. Group Server Association Selection List



Parent Group

If the selected group is a child group assigned a parent group, the parent group association may be changed.

Click in the Parent Group field and then click the list button $[\nabla]$ that appears in the field to see the list of available parent groups. Select the desired parent group association from the list of choices (see Figure 388).

Figure 388. Group Parent Group Association Selection List



Channel

If a playout channel is assigned to the selected group, the associated channel may be changed.

Click in the Channel field and then click the list button $[\nabla]$ that appears in the field to see the list of available playout channels.

Select the desired playout channel association from the list of choices (see Figure 389).

Figure 389. Group Playout Channel Association Selection List



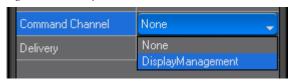
Command Channel

If a command channel is assigned to the selected group, the associated command channel may be changed.

Click in the Command Channel field and then click the list button $[\nabla]$ that appears in the field to see the list of available command channels.

Select the desired command channel association from the list of choices (see Figure 390).

Figure 390. Group Command Channel Association Selection List



Delivery

To change the delivery method associated with the selected channel, click in the Delivery field and then click the list button $[\nabla]$ that appears in the field to see the list of available delivery methods. A detailed explanation of delivery methods begins on page 297.

Select the desired delivery method from the list of choices (see Figure 391).

Figure 391. Group Delivery Method Selection List



Create a Client Object

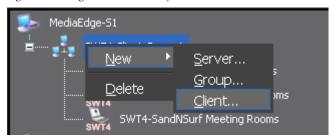
Creating client objects requires that at least one group for the client product (playout device) type already exists in the DCM.

To define a MediaEdge client, follow these steps:

1. From the Target Objects pane, select the group to which the client object will be assigned.

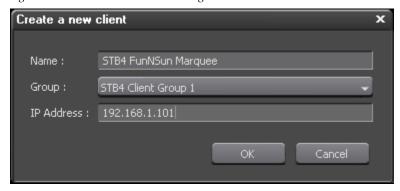
- **2.** Do one of the following:
- Click the **New client** button on the Tool bar.
- Select File>New... >Client... from the Menu bar.
- Right-Click on an existing server or group object in the Target Object Tree and select New>Client... from the menu or press the [C] key on the keyboard (see Figure 392).

Figure 392. Right-Click New Object Menu



The Create a New Client dialog shown in Figure 393 appears:

Figure 393. Create a New Client Dialog



- **3.** Enter the desired name for the new client.
- **4.** Select a group to which to assign the client object, if other than the group selected in Step 1.

Note The product type of the selected group must match the product type of the client being defined. In the example above, this is STB4.

5. Enter the IP address of the client device.

Note There is no lookup or validation of IP addresses in the MediaEdge system. You must verify the correct IP address for each server and client in the system.

6. Click the **0K** button to close the Create a New Client dialog and create the client object.

Edit a Client Object

All of the details of a client object may be set to a value other than the original value.

To change the values associated with a client object, click on the value(s) you wish to change in the Target Object Details Area and enter the desired value as explained below:

Name

Click in the name field and enter the desired client name (see Figure 394).

Figure 394. Group Name Entry



Group

Click in the Group field and then click the list button $[\nabla]$ that appears in the field to see the list of defined groups. Select the desired group association from the list of choices (see Figure 395).

Figure 395. Client Group Association Selection List



IP Address

Click in the IP Address field and enter the desired IP address (see Figure 396).

Figure 396. Client IP Address Entry



Note

Changing the IP address entry in this field does not change the IP address for the device. The IP address for the client object should only be changed here to reflect any changes that may have been made in the MediaEdge System networking infrastructure.

Delete a Target Object

To delete a target object from the Target Object Tree, do the following:

1. Select the object you wish to delete in the Target Object Tree.

Note If you delete a server object, all groups and clients associated with that server object will also be deleted. If you delete a group, all child groups and clients associated with the selected group will also deleted.

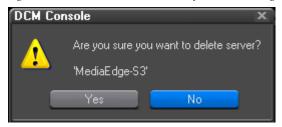
- **2.** Do one of the following:
- Click the **Delete \times** button on the Tool bar.
- Select Edit>Delete from the Menu bar.
- Press the [DEL] key on the keyboard.
- Right click on the object and select delete from the menu or press the [**D**] key on the keyboard (see Figure 397).

Figure 397. Right Click Menu - Delete



The DCM Console delete confirmation dialog shown in Figure 398 appears.

Figure 398. DCM Console Delete Confirmation Dialog



3. Click the **Yes** button to confirm deletion of the selected object.

Manually Update Servers and Groups

Normally, updates occur automatically via the update schedule defined for server or group objects. However; if the update is not scheduled to take place for several hours (or days) and you have made changes to one or more channels (e.g. added content to playlists, changed playlist start time,

length, etc.) which need to be updated before the scheduled time, a manual update can be initiated.

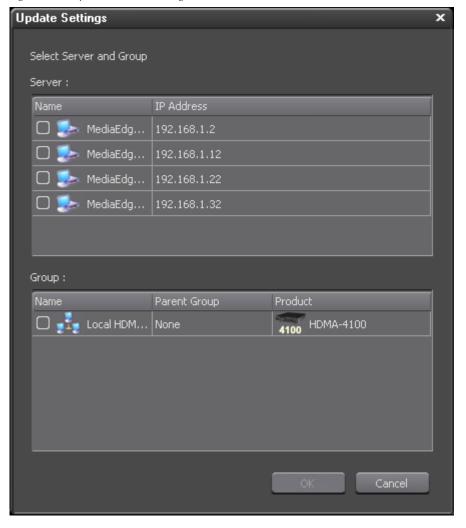
Note Manual updates do not cancel any scheduled automatic updates. These will still take place at the scheduled time.

To perform a manual update, do the following:

1. Select File>Update... from the Menu bar.

The Update Settings dialog illustrated in Figure 399 appears.

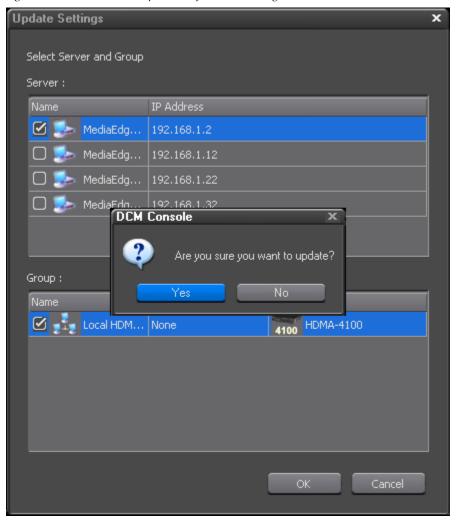
Figure 399. Update Channel Dialog



Not all groups appear in the Group section of this dialog. Only those groups that have update schedules associated with them (because no update schedule exists for the server with which the group is associated) appear in the Group list. The update schedule is set at the server or group level, but, not both.

- **2.** Select the server(s) and group(s) for which you wish to initiate a manual update.
- **3.** Click the **OK** button.
- **4.** The DCM Console update confirmation dialog shown in Figure 400 appears.

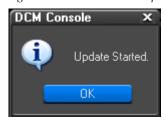
Figure 400. DCM Console Update Confirmation Dialog



5. Click the **Yes** button to confirm the server/group update.

The DCM Console update started dialog shown in Figure 401 appears.

Figure 401. DCM Console Update Started Dialog



6. Click the **OK** button to close the dialog.

CAUTION If significant changes have been made to content, playlist or channels, such as adding large content files, the manual update must be performed with sufficient time in advance of the schedule playlist start time to allow the content to be uploaded to playout devices. Numerous large files could take some time to upload.

Limitations

This section documents the various limitations inherent in MediaEdge playout devices and the Display Content Manager.

Simultaneous Playback Limitations

The number in () indicates the maximum number of files of the specified type that can be played simultaneously on the indicated playout device.

HDMA-4000/HDMA-4100/STB3/STB4/STB4H

- Video (1)
- Still Image (1)

Note Still images are limited to a maximum resolution of 2000x2000 pixels. If either dimension exceeds 2000 pixels (e.g. 2048x1536) the image is too large and should not be registered.

- Ticker (1)
- Flash (1)

Note The DCM supports any version of Flash up through the latest version depending upon the Flash player version installed on the Control PC; however, hardware playout devices support Flash files up to version 7 only.

- HTML (1)
- Audio (1)

Note If a video asset contains audio, that video asset and a separate audio asset cannot be played simultaneously as there is only one audio decoder present in these hardware devices.

Note A Ticker and a Flash animation cannot be played simultaneously.

SWT3-DS/SWT4

- Video (4)
- Still Image (16)
- Ticker (2)
- Flash (4)
- HTML (4)
- Audio (4)
- QuickTime (4)

Note QuickTime material is supported by SWT4 only.

Overlapping Playlist Content

Material can be registered in a playlist even if playback times overlap. For example, even though a Ticker and a Flash animation cannot be played simultaneously, they can exist in a playlist with overlapping times. In this case, the material with the later start time takes precedence and will be played. In other words, if a Ticker asset is in a playlist with a start time of 10:00:00 and a length of 30 minutes and a Flash animation is in the same playlist with a start time of 10:15:00, the Flash file will be played at 10:15:00 and the Ticker will not be played.

Layout Limitations

HDMA-4000/HDMA-4100/STB3/STB4/STB4H

- Layouts for these devices have a fixed size of 1920x1080 pixels.
- Video playback is at a resolution of 1920x1080 pixels.
- Image, Ticker, Flash, HTML have a playback resolution of 960x540 pixels and are zoomed to 1920x1080.
- Video is played in the background. All other material types are layered over video if the display regions overlap.
- Tickers are played in the foreground. Ticker are layered over all other material types if the display regions overlap.

SWT3/SWT4

Any layout size between 480x480 and 1920x1920 may be specified.

Layout Regions

- Up to 20 content regions may be defined per layout.
- One video-enabled region may be defined for HDMA-4000/HDMA-4100/STB3-DS/STB4/STB4H layouts.
- Up to four video-enabled regions may be defined for SWT3/SWT4 layouts.

Playlist Limitations

- The minimum playlist duration is 15 seconds.
- The maximum playlist duration is 23 hours 59 minutes and 59 seconds.
- Up to 1000 components can be specified in a playlist.

Schedule Limitations

- The minimum schedule duration is 15 seconds.
- The maximum schedule duration is 23 hours 59 minutes and 59 seconds.
- Up to 1000 items can be specified in a daily playout schedule.
- Up to 100 items can be specified in a daily command schedule.

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